C/007/039 Incoming
#5192

Canyon Fuel Company, LLC
A Subsidiary of Bowie Resource Holdings, LLC

Dugout Canyon Mine
P.O. Box 1029
Wellington, Utah 84542
(435) 637-6360
Fax (435) 636-2897

August 15, 2016

Mr. Daron Haddock
Division of Oil, Gas and Mining (DOGM)
P.O. Box 145801
Salt Lake City, Utah 84114

Subject: Phase III Bond Release Approval, Canyon Fuel Company, LLC. Dugout Canyon Mine, C/007/039, Task ID # 5192

Dear Mr. Haddock:

Canyon Fuel Company, LLC. Herby files application to modify the permit C/007/039. Enclosed please find two Clean Copies of the approved submittal to address Dugout's Phase II Bond release application

Please contact me at (435) 636-2872 should you have any questions or comments regarding the enclosed information.

Sincerely,

Bill King
Mining Engineer

RECEIVED
AUG 22 2016
DIV. OF OIL, GAS & MINING

APPLICATION FOR COAL PERMIT PROCESSING
Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: Canyon Fuel Company, LLC
Mine: Dugout Canyon Mine **Permit Number:** C/007/039
Title: Phase III Bond Release Approval, Task ID # 5192, Sites G-3 & G-4, Page 1 of 2.

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Chapter 1, Page 1-9 & 1-10
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Chapter 1, Plate 1-4
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Chapter 5, Appendix 5-6, Reclamation Bond
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 1, Page 1-2
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 1, Page 1-7
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Figure 1-1
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-2
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-4
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-5
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-11
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-14
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-19
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-20
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Page 2-23
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 2, Attachment 2-4
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 3, Page 3-2
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 3, Page 3-4
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 3, Page 3-5
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 3, Page 3-13
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 3, Page 3-17
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 3, Page 3-25
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Page 5-vi
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Page 5-2
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Page 5-17
☐ Add	☐ Replace	☒ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Figure 5-10
☐ Add	☐ Replace	☒ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Figure 5-11
☐ Add	☐ Replace	☒ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Figure 5-12
☐ Add	☐ Replace	☒ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Figure 5-17

Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	**Received by Oil, Gas & Mining**

APPLICATION FOR COAL PERMIT PROCESSING
Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: Canyon Fuel Company, LLC
Mine: Dugout Canyon Mine **Permit Number:** C/007/039
Title: Phase III Bond Release Approval, Task ID # 5192, Sites G-3 & G-4, Page 2 of 2.

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☐ Replace	☒ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Figure 5-18
☐ Add	☐ Replace	☒ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Figure 5-19
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Figure 5-26
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 5, Attachment 5-2, Table 1
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Attachment 5-4, Plate 4
☐ Add	☒ Replace	☐ Remove	Dugout M&RP, Methane Degasification Amendment, Chapter 7, Page 7-27
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	

Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	**Received by Oil, Gas & Mining**

Dugout M&RP

Chapter 1

Pages 1-9, 1-10

Plate 1-4

Dugout Canyon Mine Permit Number C/007/039

Canyon Fuel Company

CLEAN COPIES

Title page for reference only

Section 19: NE1/4SE1/4, S1/2SE1/4

Section 20: W1/2W1/2W1/2, W1/2E1/2W1/2W1/2

T13 S., R13 E., SLBM, Utah (Added to Permit Area in 2005, approximately 2,360 acres)

Section 17: E1/2SW1/4, SW1/4SE1/4, E1/2E1/2W1/2SW1/4

Section 20: E1/2W1/2, E1/2, E1/2E1/2W1/2W1/2

Section 21: SW1/4NW1/4, SW1/4

Section 28: NW1/4, N1/2SW1/4, SW1/4SW1/4

Section 29: All

Section 30: E1/2, E1/2W1/2

State Lease ML-50582-OBA - (320 acres)

T13 S., R13 E., SLBM, Utah

Section 16: W1/2

Waste Rock Storage Facility - Fee land owned by CFC

T. 14 S., R. 12 E., SLBM, Utah (Approximately 26.8 acres)

Section 18: Portions of NE1/4, SW1/4 and SE1/4 of the NE1/4

All of Lease ML-42648, except the E1/2 of Section 8 and the NE1/4 of Section 17, is included within the Dugout Canyon Mine permit boundary. However, only the S1/2 SE1/4 of Section 9 from Lease ML-42649 is within the permit boundary. The ten acres described in UTU-76601 are also described in UTU-77985. The U.S. Department of Interior, Bureau of Land Management (BLM) right-of-way application UTU-76601 is included in Appendix 1-3.

The disturbed area encompasses 20.80 acres (Mine Facility area, including Gilson well pad and small substation), 39.7 (G-2, G-5, G-6, G-7, G-9, G-10, G-11, G-12, G-13, G-14, G-15, G-16, G-17, G-18, G-19, G-22 (including access road), G-25, G-26, G-29, G-30 and G-31 Degas Well), 14.25 acres (AMV Road) 0.85 (Topsoil Stockpile), 1.8 acres (Leach field/pipeline area), 2.7 acres (Pace Canyon Fan Facility) and 26.8 acres (Refuse Pile area) totaling approximately 106.9 acres. That acreage includes a pre- and post mining road with an area of 1.6 acres and 2.03 acres of

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

undisturbed land within the mine facilities disturbed area and 11.2 acres within the refuse pile disturbed area.

The permit boundary encompasses approximately 9,568 acres which includes the acreage as presented in the table below, also refer to Plate 1-1 and RA Plate 1-1 for additional information. Coal ownership acreage within the permit area includes approximately 2,941 acres of federal coal, approximately 5,800 acres of state coal, and 827 acres of fee coal as shown in the table below (Plate 1-2 and RA1-1B). Approximately 745 acres which include the surface subsidence area, refuse pile and leach field areas will not be mined although their acreage is included in the surface and coal ownership acreage totals.

Acreage Table
(all acreage is approximate)

Disturbed Area	Acreage	**Surface Ownership**	Acreage	**Coal Ownership**	Acreage
Dugout Cyn. Facility	20.8	Federal	627	Federal	2941
Degas (3/24/10)	39.7	State of Utah	920	State	5800
AMV Road	14.25	Fee	8021	Fee	827
Topsoil Stockpile	0.85				
Leachfield	1.8				
Fan Portal	2.7				
Refuse Pile	26.8				
Total	106.9		9568		9568
Acres of Land Within Permit Area under Lease and Fee Lands					
State Leases	Acres	Federal Leases	Acres	BLM	Acres
ML-42648	3160	U-07064-027821	2881	ROW UTU-76601	10
ML-42649	80			ROW UTU-77985	47.5
ML-48435-OBA	2560			Parcel	2.5
ML-50582-OBA	0	**Fee Acreage**	827		
Total (Rounded)	5800		3708		60

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Dugout M&RP

Chapter 5

Appendix 5-6, Reclamation Bond

Dugout Canyon Mine Permit Number C/007/039

Canyon Fuel Company

CLEAN COPIES

Title page for reference only

APPENDIX 5-6

Reclamation Bond Estimate

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Direct Costs		
Subtotal Demolition and Removal	$728,253	
Subtotal Backfilling and Grading	$1,049,995	
Subtotal Revegetation	$435,566	
Direct Costs	$2,213,814	
Indirect Costs		
Mob/Demob	$221,381	10.0%
Contingency	$110,691	5.0%
Engineering Redesign	$55,345	2.5%
Main Office Expense	$150,539	6.8%
Project Management Fee	$55,345	2.5%
Subtotal Indirect Costs	$593,301	26.8%
Total Reclamation Cost 2015 Dollars	$2,807,115	
Escalation factor for 2015		0.012
Number of years to next review		5
Escalation	$172,518.00	
Escalated Reclamation Cost to 2020	$2,979,633.23	
Reclamation Cost (rounded to nearest $1,000)	$2,980,000.00	
Bond Amount in 2009 Dollars	$3,550,000.00	
Difference Between Cost Estimate and Bond	$570,000.00	
Percent Difference	16.06%	

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

$$Escalated\$ = \left(\$ \times \left[1 + Rate\right]^{Years}\right)$$

Demo Line Item Subtotals

Ref.	Description	Cost 2015 Dollars
1	Mine Belt BC-1	$ 11,120
2	Transfer Building	$ 22,460
3	Feed Belt BC 2	$ 7,524
4	Stack Tubes 2	$ 4,686
5	Head House 1	$ 4,098
6	Transfer Belt BC 2	$ 5,019
7	Head House 2	$ 1,376
8	Reclaim Tunnel	$ 38,640
9	Reclaim Belt BC 4	$ 7,033
10	Escape Tunnel 60 inch	$ 1,119
11	Crusher Building	$ 18,507
12	Truck Loadout Belt BC 5	$ 6,306
13	Truck Loadout and Scale	$ 16,232
14	Bathhouse	$ 76,623
15	Substation	$ 2,281
16	Power Lines and Poles	$ 2,828
17	Retaining Wall	$ 891
18	Gabion Wall	$ 21,314
19	Pump House	$ 3,474
20	Paved Road	$ 150,348
21	Stream Culvert 72 inch	$ 28,588
22	Water Tanks	$ 2,466
23	Rock Dust Bin	$ 1,396
24	Fuel Tank and Fuel Station	$ 1,830
25	Holding Tank	$ 3,198
26	Ventilation Fan	$ 1,714
27	Magnet	$ 3,953
28	Water System	$ 27,407
29	Sewage System	$ 9,185
30	Storage Containers (8)	$ 11,257
31	Gilson Well	$ 2,901
32	Switch House	$ 6,364
33	Portals No	$ 28,326
34	Storage & Bolts Bin	$ 2,955
35	Storage Building	$ 2,183
36	Sampling System	$ 1,270
37	Stoker Storage Bin	$ 1,039
38	Substation No 2	$ 2,524
39	Gabion Baskets	$ 1,488
40	Pace Fan Culvert	$ 1,691
41	Pace Fan & Generators	$ 52,618
42	Pace Fan Portal	$ 5,766
43	Refuse Pile	$ 30,704
44	Refuse Site	$ 14,463
45	Degas Well G2	$ 10,759
46	Degas Well G-5	$ 7,972
47	Degas Well G 6	$ 3,242
48	Degas Well G-7	$ 6,109
49	Degas Well G-9	$ 7,912
50	Degas Well G-10	$ 8,143
51	Degas Well G-11	$ 4,077
52	Degas Well G-12	$ 5,783
53	Degas Well G-13	$ 9,262
54	Degas Well G-14	$ 7,463
55	Degas Well G-15	$ 5,464
56	Degas Well G-16	$ 7,385
57	Degas Well G-17	$ 7,200
58	Degas Well G-18	$ 15,158
59	Degas Well G-19	$ 9,142
60	Degas Well G-22 & Access Road	$ 15,993
61	Degas Well G-25	$ 9,067
62	Degas Well G-26	$ 8,441
63	Degas Well G-30	$ 8,917
64	Degas Well G-31	$ 18,881
65	AMV Road	$ 47,689
	Total	$ 871,225

TOTAL with Phase I & II Bond Release Applied

Total with Phase I & II Bond Release	728,253

Phase I & II Bond Release of Degas Wells Breakout

Description	Phase I Bond Release 60%	Phase II Bond Release 40%	Total
Degas Well G2	$ 6,455	$ 4,304	$ 10,759
Degas Well G-5	$ 4,783	$ 3,189	$ 7,972
Degas Well G 6	$ 1,945	$ 1,297	$ 3,242
Degas Well G-7	$ 3,665	$ 2,444	$ 6,109
Degas Well G-9	$ 4,747		$ 4,747
Degas Well G-10	$ 4,886	$ 3,257	$ 8,143
Degas Well G-11			
Degas Well G-12	$ 3,470	$ 2,313	$ 5,783
Degas Well G-13	$ 5,557	$ 3,705	$ 9,262
Degas Well G-14	$ 4,478	$ 2,985	$ 7,463
Degas Well G-15			
Degas Well G-16	$ 4,431		$ 4,431
Degas Well G-17			
Degas Well G-18	$ 9,095	$ 6,063	$ 15,158
Degas Well G-19	$ 5,485		$ 5,485
Degas Well G-22 & Access Road	$ 9,596		$ 9,596
Degas Well G-25	$ 5,440		$ 5,440
Degas Well G-26	$ 5,065		$ 5,065
Degas Well G-30	$ 5,350		$ 5,350
Degas Well G-31	$ 11,329	$ 7,552	$ 18,881
AMV Road	$ 10,086		$ 10,086
Total	$ 105,863	$ 37,109	$ 142,972

NCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
1	**Mine Belt BC-1**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						62800					CF		62800	CF	
	No interior Wall Deduct		02 41 16 13 0750	50%													0.5	31400		$ 8,792
	Structure's Vol. Demolished																	1163	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											52				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										3.3					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									1.1		DAY		2	DAY	$ 1,382
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	40.05	HR									8.8		HR		8.8	HR	$ 352
	Disposal Cost Steel																			
	Subtotal																			$ 10,526
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	CY						20					CY		20	CY	$ 275
	Concrete's Vol. Demolished																1.3	26	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1501	0.96	/CY													26	CY	$ 25
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3314	2.26	/CY						26					CY		26	CY	$ 59
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													26	CY	$ 235
	Subtotal																			$ 594
	Total																			**$ 11,120**

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED

AUG 0 2 20[illegible]

Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
2	**Transfer Building**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						104618					CF		104618	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	52309		$ 14,647
	Rubble's Weight (exclude steel)																	1937.37037	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											50				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										3.1					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Tmv	40.05	HR									8		HR		8	HR	$ 320
	Disposal Cost Steel																			
	No interior Wall Deduct																			$ -
	Subtotal																			$ 15,658
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						229					CY		229	CY	$ 3,149
	Concrete's Vol. Demolished																1.3	298	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													298	CY	$ 286
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	31 23 23.20 3014	2.26	/CY						298					CY		298	CY	$ 673
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													298	CY	$ 2,694
	Subtotal																			$ 6,802
	Total																			$ 22,460

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
3	**Feed Belt BC 2**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						47438					CF		47438	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	23719		$ 6,641
	Rubble's Weight (exclude steel)																	878.5	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											30				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										1.9					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.6		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	40.05	HR									4.8		HR		4.8	HR	$ 192
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 7,524
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 7,524

NOTES

Assumes no interior walls

INCORPORATED
AUG 0 2 20[illegible]
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
4	**Stack Tubes 2**																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ -
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						158					CY		158	CY	$ 2,173
	Concrete's Vol. Demolished																1.3	205	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													205	CY	$ 197
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						205					CY		205	CY	$ 463
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													205	CY	$ 1,853
	Subtotal																			$ 4,686
	Total																			**$ 4,686**

NOTES

Assumes 6" thick concrete unreinforced slab

INCORPORATED
AUG 0 2 '07
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
5	**Head House 1**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						23878					CF		23878	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	11939		$ 3,343
	Rubble's Weight (exclude steel)																	442.2	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											10				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.6					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.2		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	40.05	HR									1.6		HR		1.6	HR	$ 64
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 4,098
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			**$ 4,098**

NOTES

Assumes no interior walls

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
6	**Transfer Belt BC 2**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						30000					CF		30000	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	15000		$ 4,200
	Rubble's Weight (exclude steel)																	555.6	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											20				TON		20	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										1.3					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.4		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									3.2		HR		3.2	HR	$ 128
	Disposal Cost Steel																			
	Subtotal																			$ 5,019
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 5,019

NOTES

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
7	**Head House 2**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						4436					CF		4436	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	2218		$ 621
	Rubble's Weight (exclude steel)																	82.1	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											10				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.6					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.2		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	trhv	40.05	HR									1.6		HR		1.6	HR	$ 64
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 1,376
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 1,376

NOTES

Assumes no interior walls

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
8	**Reclaim Tunnel**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						18774					CF		18774	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	9387		$ 2,628
	Rubble's Weight (exclude steel)																	347.7	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											32				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										2					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.7		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									5.6		HR		5.6	HR	$ 224
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 3,543
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielsen '14	13.75	CY						1182					CY		1182	CY	$ 16,253
	Concrete's Vol. Demolished																1.3	1537	CY	$ -
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													1537	CY	$ 1,476
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi, rnd. trip	31 23 23.20 3014	2.26	/CY						1537					CY		1537	CY	$ 3,474
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													1537	CY	$ 13,894
	Subtotal																			$ 35,097
	Total																			$ 38,640

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
9	**Reclaim Belt BC 4**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						35180					CF		35180	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	52%													0.5	17590		$ 4,925
	Rubble's Weight (exclude steel)																	651.5	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel	Truck																		
	Transportation Cost Non Steel	Drive																		
	Disposal Cost Non Steel																			
	Steel's Weight											40				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										2.5					CY				
	Transportation Cost Steel Tru	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.8		DAY		1	DAY	$ 691
	Transportation Cost Steel Tru	Truck Driver, Heavy	TRHV	40.05	HR									6.4		HR		6.4	HR	$ 256
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 5,872
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	CY						39					CY		39	CY	$ 536
	Concrete's Vol. Demolished																1.3	51	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													51	CY	$ 49
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						51					CY		51	CY	$ 115
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													51	CY	$ 461
	Subtotal																			$ 1,161
	Total																			**$ 7,033**

NOTES

Assumes 6" thick concrete unreinforced slab
Assumes no interior walls
Truck rental totaled for entire sheet

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
10	**Escape Tunnel 60 inch**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						2827					CF		2827	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	1413.5		$ 396
	Rubble's Weight (exclude steel)																	52.4	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											4				TON				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.3					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									0.8		HR		0.8	HR	$ 32
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 1,119
	Total																			$ 1,119

NOTES

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
11	**Crusher Building**																			
	Structure's Demolition Cost	Steel Bld, Large	02 41 16 13 0020	0.28	/CF						93305					CF		93305	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	46652.5		$ 13,063
	Rubble's Weight (exclude steel)																	1727.9	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel	Truck																		
	Transportation Cost Non Steel	Drive																		
	Disposal Cost Non Steel																			
	Steel's Weight											100				TON		100	TON	
	Truck's Capacity	12 CY (16 Ton) Dump Truck									12	16		3		CY Trips				
	Haulage										6.3					CY				
	Transportation Cost Steel Tru	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									2.1		DAY		3	DAY	$ 2,073
	Transportation Cost Steel Tru	Truck Driver, Heavy	TRHV	40.05	HR									16.8		HR		16.8	HR	$ 673
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 15,809
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						91					CY		91	CY	$ 1,251
	Concrete's Vol. Demolished																1.3	118	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													118	CY	$ 113
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						118					CY		118	CY	$ 267
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													118	CY	$ 1,067
	Subtotal																			$ 2,698
	Total																			**$ 18,507**

NOTES
Assumes 6" thick concrete unreinforced slab
Assumes no interior walls

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Material	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
12	**Truck Loadout Belt BC 5**																			
	Structure's Demolition Cost	Steel Bld, Large	02 41 16 13 0020	0.28	/CF						30899					CF		30899	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	15449.5		$ 4,326
	Rubble's Weight (exclude steel)																	572.2	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											20				TON		20	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										1.3					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.4		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									3.2		HR		3.2	HR	$ 128
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 5,145
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						39					CY		39	CY	$ 536
	Concrete's Vol. Demolished																1.3	51	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													51	CY	$ 49
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						51					CY		51	CY	$ 115
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													51	CY	$ 461
	Subtotal																			$ 1,161
	Total																			**$ 6,306**

NOTES

Assumes 6" thick concrete unreinforced slab
Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
13	**Truck Loadout and Scale**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						74976					CF		74976	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	37488		$ 10,497
	Rubble's Weight (exclude steel)																	1388.4	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											50				TON		50	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										3.1					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									8		HR		8	HR	$ 320
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 11,508
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						159					CY		159	CY	$ 2,186
	Concrete's Vol. Demolished																1.3	207	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													207	CY	$ 199
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. trip	31 23 23.20 3014	2.26	/CY						207					CY		207	CY	$ 468
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													207	CY	$ 1,871
	Subtotal																			$ 4,724
	Total																			**$16,232**

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
14	**Bathhouse**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						416365					CF		416365	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	208182.5		$ 58,291
	Rubble's Weight (exclude steel)																	7710.5	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											107								
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										6.7					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									2.2		DAY		3	DAY	$ 2,073
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									17.6		HR		17.6	HR	$ 705
	Disposal Cost Steel																			
	Subtotal																			$ 61,069
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						524					CY		524	CY	$ 7,205
	Concrete's Vol. Demolished																1.3	681	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													681	CY	$ 654
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						681					CY		681	CY	$ 1,539
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													681	CY	$ 6,156
	Subtotal																			$ 15,554
	Total																			**$ 76,623**

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
15	**Substation**																			
	Structure's Demolition Cost	Steel Bld, Large	02 41 16 13 0020	0.28	/CF						4000					CF		4000	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	2000		$ 560
	Rubble's Weight (exclude steel)																	74.1	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											50				TON		50	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										3.1					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton Payload	01 54 33 20 5300	691	/day									1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									8		HR		8	HR	$ 320
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 1,571
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						24					CY		24	CY	$ 330
	Concrete's Vol. Demolished																1.3	31	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													31	CY	$ 30
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						31					CY		31	CY	$ 70
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													31	CY	$ 280
	Subtotal																			$ 710
	Total																			$ 2,281

NOTES
Assumes 6" thick concrete unreinforced slab
Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
16	**Power Lines and Poles**																			
	Structure's Demolition Cost	Dugout Power line	26 05 05 10 1300	19.6	/CLF	1937										CLF		19.37	CLF	$ 380
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ 380
	Power Poles																			
	Equipment 's Disposal Cost	Dugout Power Poles	02 41 13.80 0100	204	/EA										12	EA		12	EA	$ 2,448
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ 2,448
	Total																			**$ 2,828**

NOTES

CLF=100 linear ft

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
17	**Retaining Wall**																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ -
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						30					CY		30	CY	$ 413
	Concrete's Vol. Demolished																1.3	39	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													39	CY	$ 37
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						39					CY		39	CY	$ 88
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													39	CY	$ 353
	Subtotal																			$ 891
	Total																			**$ 891**

NOTES

Assumes 6" thick concrete unreinforced slab
4/23/15 Dugout states concrete retaining wall

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
18	**Gabion Wall**																			
	Structures Volume	Gabion Removal	02 41 13.90 1320	17.83	ea						880							880	ea	$ 15,690
	Demolition Time 60 CY/ DAY																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive	Truck Driver, Heavy	Trhv	40.05	HR									117		HR		117	HR	$ 4,686
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Hilfiker Mesh	Select Demo disposal loading, and haul	02 41 19.19 5000	0.87	/CY													513	CY	$ 446
	Load Mesh into Dumpster	Front End Loader 3 CY	31 23 16.42 1601	0.96	/CY													513	CY	$ 492
	Disposal Cost Steel																			
	Subtotal																			$ 21,314
	Total																			$ 21,314

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
19	**Pump House**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						2219					CF		2219	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	1109.5		$ 311
	Rubble's Weight (exclude steel)																	41.1	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											5				TON		5	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.3					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									0.8		HR		0.8	HR	$ 32
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 1,034
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						82					CY		82	CY	$ 1,128
	Concrete's Vol. Demolished																1.3	107	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													107	CY	$ 103
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi, rnd. trip	31 23 23.20 3014	2.26	/CY						107					CY		107	CY	$ 242
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													107	CY	$ 967
	Subtotal																			$ 2,440
	Total																			**$3,474**

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
20	**Paved Road**																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ -
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Asphalt Demolition																			
	Demolition Cost	Pavement Removal 4-6"	02 41 13 17 5050	7.12	/SY					19500						SY		19500	SY	$ 138,840
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY						1273					CY		1273	CY	$ 11,508
	Subtotal																			$150,348
	Total																			**$ 150,348**

NOTES

4/23/15 Dugout is burying the concrete in place, no haul cost associated with demo

INCORPORATED
AUG 0 2 '07
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
21	**Stream Culvert 72 inch**																			
	Excavate Culvert	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY	2350	12	12								CF		12533	CY	$ 12,032
	Backfill Culvert	Backfill structural 300 HP	31 23 23 14 5020	0.84	/CY	2350	12	12								CF		12533	CY	$ 10,528
	Structure's Vol. Demolished																	464.2	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											94				TON		94	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									5.9		DAY		6	DAY	$ 4,146
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									47		HR		47	HR	$ 1,882
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 28,588
	Total																			**$ 28,588**

NOTES

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
22	**Water Tanks**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						241					CF		241	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	120.5		$ 34
	Rubble's Weight (exclude steel)																	4.5	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											39				TON		39	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										2.4					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.8		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRFV	40.05	HR									6.4		HR		6.4	HR	$ 256
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 981
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						50					CY		50	CY	$ 688
	Concrete's Vol. Demolished																1.3	65	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													65	CY	$ 62
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd trip	31 23 23.20 3014	2.26	/CY						65					CY		65	CY	$ 147
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													65	CY	$ 588
	Subtotal																			$ 1,485
	Total																			$ 2,466

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
23	**Rock Dust Bin**																			
	Structure's Demolition Cost	Steel Bld, Large	02 41 16 13 0020	0.28	/CF						2265					CF		2265	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	1132.5		$ 317
	Rubble's Weight (exclude steel)																	41.9	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											5				TON		5	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.3					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									0.8		HR		0.8	HR	$ 32
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 1,040
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						12					CY		12	CY	$ 165
	Concrete's Vol. Demolished																1.3	15.6	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													15.6	CY	$ 15
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi, rnd. trip	31 23 23.20 3014	2.26	/CY						15.6					CY		15.6	CY	$ 35
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													15.6	CY	$ 141
	Subtotal																			$ 356
	Total																			**$1,396**

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
24	Fuel Tank and Fuel Station																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						3945					CF		3945	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	1972.5		$ 552
	Rubble's Weight (exclude steel)																	73.1	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											7				TON		7	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.4					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									0.8		HR		0.8	HR	$ 32
	Disposal Cost Steel																			
	Subtotal																			$ 1,275
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						18.66					CY		18.66	CY	$ 257
	Concrete's Vol. Demolished																1.3	24.3	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													24.3	CY	$ 23
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						24.3					CY		24.3	CY	$ 55
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													24.3	CY	$ 220
	Subtotal																			$ 555
	Total																			$ 1,830

NOTES

Assumes 6" thick concrete unreinforced slab

Assumes no interior walls

INCORPORATED
AUG 0 2 '20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
25	**Holding Tank**																			
	Structure's Demolition Cost	Septic Tanks & Related Components	C2 41 13 44 0600	2015	EA													1		$ 2,015
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	On site disposal	C2 41 16 17 4200	9.04	CY						50					CY		50	CY	$ 452
	Steel's Weight											2				TON		2	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.1	51.76	HR		1	day	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	40.05	HR									1		HR		1	HR	$ 40
	Disposal Cost Steel																			
	Subtotal																			$3,198
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$3,198

NOTES

INCORPORATED
AUG 0 2 '07
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
26	**Ventilation Fan**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						6850					CF		6850	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	3425		$ 959
	Rubble's Weight (exclude steel)																	126.9	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											10				TON		10	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.6					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.2		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	40.05	HR									1.6		HR		1.6	HR	$ 64
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 1,714
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 1,714

NOTES

Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
27	**Magnet**																			
	Structure's Demolition Cost	Steel Building Small	02 41 16 13 0500	0.3	CF						35					CF		35		
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	17.5		$ 5
																		0.6	CY	
	Rubble's Weight (exclude steel)	Truck Mounted Crane 55 ton	01 54 33 60 2600	76.8	HR										2	HR		2	HR	$ 154
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	Dump Charges	02 41 19.20 0100	74	CY													35	CY	2590
	Steel's Weight											2				TON		2	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.1					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.03		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Trhv	40.05	HR									0.2		HR		0.2	HR	$ 8
	Disposal Cost Steel																			
	Subtotal																			$ 3,448
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						17					CY		17	CY	$ 234
	Concrete's Vol. Demolished																1.3	22.1	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													22.1	CY	$ 21
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						22.1					CY		22.1	CY	$ 50
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													22.1	CY	$ 200
	Subtotal																			$ 505
	Total																			$ 3,953

NOTES

Assumes 6" thick concrete unreinforced slab
Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
28	**Water System**																			
	Excavate Pipe	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY	8450	2	4								FT		2504	CY	$ 2,404
	Pipe Removal	Pipe removal	02 41 13.38 1700	2.71	/LF	8450										FT		8450		$ 22,900
	Backfill Trench	Backfill structural 300 HP	31 23 23 14 5020	0.84	/CY	8450	2	4								FT		2504	CY	$ 2,103
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ 27,407
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 27,407

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
29	**Sewage System**																			
	Excavate Pipe	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY	2832	2	4								FT		839	CY	$ 805
	Pipe Removal	Pipe removal	02 41 13.38 1700	2.71	/FT	2832										FT		2832		$ 7,675
	Backfill Trench	Backfill structural 300 HP	31 23 23 14 5020	0.84	/CY	2832	2	4								FT		839	CY	$ 705
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ 9,185
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			**$ 9,185**

NOTES

See Dugout Canyon Mine Leach Field Amendment pg 5-13 states sewer pipeline and leach field piping and concrete boxes will be left in place as part of the final reclamation.

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
30																				
	Storage Containers (8)																			
	Load, Transport, and Return Trip	Truck Mounted Crane 55 ton	01 54 33 60 2600	76.8	HR									16		HR		16		$ 1,229
	Structure's Demolition Cost	Mixed Materials Bld. Large	02 41 16 13 0100	0.3	/CF	40	10	10							8	EA		32000	CF	$ 9,600
	Structure's Vol. Demolished																0.35	415	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	Building Construction Materials	02 41 19.19 0400	4	/CY							107						107	CY	$ 428
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ 11,257
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 11,257

NOTES

All Storage Containers will be salvaged

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
31	**Gilson Well**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						800					CF		800	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	400		$ 112
	Rubble's Weight (exclude steel)																	14.8	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											0.5				TON		0.5	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										1					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.3		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									2.4		HR		2.4	HR	$ 96
	Disposal Cost Steel																			
	Subtotal																			$ 899
	Plug Well Casing	Concrete Ready Mix 8000 PSI	03 31 13.35 0412	123	CY						3					CY		3	CY	$ 369
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ 369
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						55					CY		55	CY	$ 756
	Concrete's Vol. Demolished																1.3	71.5	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													71.5	CY	$ 69
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						71.5					CY		71.5	CY	$ 162
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													71.5	CY	$ 646
	Subtotal																			$ 1,633
	Total																			$ 2,901

NOTES
Assumes 6" thick concrete unreinforced slab
Assumes no interior walls

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
32	**Switch House**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF						14400					CF		14400	CF	$ 4,032
	Structure's Vol. Demolished																	533.3	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											1				TON		1	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.1					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.03		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									0.2		HR		0.2	HR	$ 8
	Disposal Cost Steel																			
	Subtotal																			$ 4,731
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						55					CY		55	CY	$ 756
	Concrete's Vol. Demolished																1.3	71.5	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													71.5	CY	$ 69
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						71.5					CY		71.5	CY	$ 162
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													71.5	CY	$ 646
	Subtotal																			$ 1,633
	Total																			$ 6,364
	NOTES																			

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
33	**Portals No**																			
	Structure's Demolition Cost	Foundations <15"	Nielson '14	13.75	CY						34				5	EA		170	CY	$ 2,338
	Loading Cost																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Concrete Unit Masonry	Concrete Block, Back Up	04 22 10.14 1250	10.96	/SF						400				5	EA		2000	CY	$ 21,920
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY						90				5	EA		450	CY	$ 4,068
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ 28,326
	Total																			$ 28,326

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
34	**Storage & Bolts Bin**																			
	Structure's Demolition Cost	LG Steel Bldg/include 20 mi haul	02 41 16 13 0020	0.28	/CF						3272					/CF		3272	/CF	$ 916
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.44		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	Troy	40.05	HR									4		HR		4	HR	$ 160
	Disposal Cost Steel																			
	Subtotal																			$ 1,767
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						39.99					CY		39.99	CY	$ 550
	Concrete's Vol. Demolished																1.3	52	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													52	CY	$ 50
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						52					CY		52	CY	$ 118
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													52	CY	$ 470
	Subtotal																			$ 1,188
	Total																			**$ 2,955**

NOTES

Assumes 6" thick slab concrete

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
35	**Storage Building**																			
	Structure's Demolition Cost	Steel Bld, Large	02 41 16 13 0020	0.28	/CF						2284					CF		2284	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	1142		$ 320
	Rubble's Weight (exclude steel)																	42.3	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											6				TON		6	TON	
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.4					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRI-V	40.05	HR									0.8		HR		0.8	HR	$ 32
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 1,043
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						38.4					CY		38.4	CY	$ 528
	Concrete's Vol. Demolished																1.3	49.9	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													49.9	CY	$ 48
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						49.9					CY		49.9	CY	$ 113
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													49.9	CY	$ 451
	Subtotal																			$ 1,140
	Total																			**$ 2,183**

NOTES
Assumes 6" thick slab concrete

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
36	**Sampling System**																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.14		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									1.1		HR		1.1	HR	$ 44
	Disposal Cost Steel																			
	Subtotal																			$ 735
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						18					CY		18	CY	$ 248
	Concrete's Vol. Demolished																1.3	23.4	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													23.4	CY	$ 22
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						23.4					CY		23.4	CY	$ 53
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													23.4	CY	$ 212
	Subtotal																			$ 535
	Total																			**$ 1,270**

NOTES

Assumes 6" thick slab concrete

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
37	**Stoker Storage Bin**																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ -
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						35					CY		35	CY	$ 481
	Concrete's Vol. Demolished																1.3	45.5	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													45.5	CY	$ 44
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. md. trip	31 23 23.20 3014	2.26	/CY						45.5					CY		45.5	CY	$ 103
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													45.5	CY	$ 411
	Subtotal																			$ 1,039
	Total																			**$ 1,039**

NOTES

Assumes 6" thick slab concrete

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
38	**Substation No 2**																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02 41 16 13 0100	0.3	/CF						4000					CF		4000	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	2000		$ 600
	Rubble's Weight (exclude steel)																	74.1	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	6000 gal. to 8000 gal. tank	02115 200 0310	232	Ea.										1	EA		1	EA	232
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 832
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						57					CY		57	CY	$ 784
	Concrete's Vol. Demolished																1.3	74.1	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													74.1	CY	$ 71
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						74.1					CY		74.1	CY	$ 167
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													74.1	CY	$ 670
	Subtotal																			$ 1,692
	Total																			**$ 2,524**

NOTES

Assumes 6" thick slab concrete

INCORPORATED
AUG 0 2 '20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
39	**Gabion Baskets**																			
	Excavate	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY						88					CY		88		$ 84
	Support	CLAB	Clab	37.6	HR									8		hr		8	hr	$ 301
	Disposal	On site disposal	02 41 16 17 4200	9.04	/CY						122					CY		122	CY	$ 1,103
	See Earthwork																			
	Subtotal																			$ 1,488
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			**$ 1,488**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
40	**Pace Fan Culvert**																			
	Excavate Culvert	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY	585	3	8										520	CY	$ 499
	Backfill Culvert	Backfill structural 300 HP	31 23 23 14 5020	0.84	/CY	585	3	8										520	CY	$ 437
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight											8.5				ton				
	Truck's Capacity										12	16		3		CY Trips				
	Haulage										0.5					CY				
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.2		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									1.6		HR		1.6	HR	$ 64
	Disposal Cost Steel																			
	Subtotal																			$ 1,691
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			**$ 1,691**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
41	**Pace Fan & Generators**																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.28	/CF	25	25	12								CF		7500	CF	
	Structure's Vol. Demolished	No interior Wall Deduct	02 41 16 13 0750	50%													0.5	3750		$ 1,050
	Rubble's Weight (exclude steel)																	138.9	CY	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									1		DAY		1	DAY	$ 691
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									8		HR		8	HR	$ 320
	Disposal Cost Steel																			
	No interior Wall Deduct																			
	Subtotal																			$ 2,061
	Equipment 's Disposal Cost																			
	Ducting	Mechanical equipment heavy	23 05 05.10 3600	780	/ton							35				ton		35	ton	$ 27,300
	Fan	Mechanical equipment heavy	23 05 05.10 3600	780	/ton							10				ton		10	ton	$ 7,800
	Hilfiker Mesh	Mechanical equipment heavy	23 05 05.10 3600	780	/ton							0.7				ton		0.7	ton	$ 546
	Portal plate liner	Mechanical equipment heavy	23 05 05.10 3600	780	/ton							1.2				ton		1.2	ton	$ 936
	Total steel weight											46.9								
	Transportation Cost Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	691	/day									0.6		DAY		0.6	DAY	$ 415
	Transportation Cost Steel Truck Drive	Truck Driver, Heavy	TRHV	40.05	HR									5		HR		5	HR	$ 200
	Subtotal																			$ 37,197
	Portal plate liner																			
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						70					CY		70	CY	$ 963
	Concrete's Vol. Demolished																1.3	91	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													91	CY	$ 87
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						91					CY		91	CY	$ 206
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													91	CY	$ 823
	Subtotal																			$ 2,079
	Generator Pad																			
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						128					CY		128	CY	$ 1,760
	Concrete's Vol. Demolished																1.3	166.4	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													166.4	CY	$ 160
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						166.4					CY		166.4	CY	$ 376
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													166.4	CY	$ 1,504
	Subtotal																			$ 3,800
	Fan Building																			
	Concrete Demolition																			
	Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						252					CY		252	CY	$ 3,465
	Concrete's Vol. Demolished																1.3	327.6	CY	
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY													327.6	CY	$ 314
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 3014	2.26	/CY						327.6					CY		327.6	CY	$ 740
	Disposal Costs	On site disposal	02 41 16 17 4200	9.04	/CY													327.6	CY	$ 2,962
	Subtotal																			$ 7,481
	Total																			**$ 52,618**

NOTES

Assume 6" thick slab none reinforced concrete

INCORPORATED
AUG 0 2 '07
Div. of Oil Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
42	**Pace Fan Portal**																			
	Structure's Demolition Cost	Foundations <15"	Nielson '14	13.75	/CY						90				1	EA		1	EA	$ 1,238
	Loading Cost	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY						150				1	EA		1	EA	$ 144
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Concrete Unit Masonry	Concrete Block, Back Up	04 22 10.14 1250	10.96	/SF						400				1	EA		400		$ 4,384
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Costs																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ 5,766
	Total																			$ 5,766

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
43	**Refuse Pile**																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			$ -
	Erosion Control																			
	Riprap	Machine placed rip-rap slope protection	31 37 13 10 0100	52.9	CY						561					CY		561	CY	$ 29,677
	Polypropylene Mesh	Polypropylene mesh	31 25 14.16 0100	0.61	SY					1683						SY		1683	SY	$ 1,027
	Subtotal																			$ 30,704
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			**$ 30,704**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
44	**Refuse Site**																			
	See Earthwork also																			
		Fencing Barbed wire 3 strand	02 41 13 60 1600	1.4	/LF	3250										FT		3250	FT	$ 4,550
	Remove Fence	Chain link remove 8'-10'	02 41 13 60 1700	3.05	/LF	3250										FT		3250	FT	$ 9,913
	Subtotal																			$ 14,463
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 14,463

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
45	**Degas Well G2**																			
	Grade and Backfill	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY						378					CY		378	CY	$ 363
	Fill in Mud Pit	Backfill Trench minimal Haul 2 1/4 CY	31 23 16 13 3080	1.8	/CY						1246					CY		1246	CY	$ 2,243
	Subtotal																			$ 2,606
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						20					CY		20	CY	$ 2,460
	Subtotal																			$ 2,460
	Spread Topsoil	Front end loader 3 CY	31 23 16 42 1601	0.96	/CY						3104					CY		3104	CY	$ 2,980
	Subtotal																			$ 2,980
	Fence																			
	Remove Barbed Wire	Fencing Barbed wire 3 strand	02 41 13 60 1600	1.4	/LF	1200										FT		1200	FT	$ 1,680
	Subtotal																			$ 1,680
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	per HR									16		hr		16	hr	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		hr		16	hr	$ 223
	Subtotal																			$ 1,033
	Total																			$ 10,759

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Material	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
46	**Degas Well G-5**																			
	Grading and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						818					CY		818	CY	$ 785
	Fill Mud Pit	Backfill Trench Minimal Haul 2 1/4 CY	31 23 16 13 3080	1.8	/CY						110					CY		110	CY	$ 198
	Plug well Casing	Concrete ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	/CY						1909					CY		1909	CY	$ 1,833
	Remove Barbed Wire	Fencing Barbed wire 3 strand	02 41 13 60 1600	1.4	/LF	1100										LF		1100	LF	$ 1,540
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	per HR										16	HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR										16	HR		16	HR	$ 223
	Subtotal																			$ 7,972
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			$ 7,972

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
47	**Degas Well G 6**																			
	Grading and Backfill	Front End Loader 3 CY	31 23 ˜6 42 1601	0.96							682					CY		682	CY	$ 655
																CY				
	Fill Mud Pit	Backfill Trench Minimal Haul 2 1/4	31 23 ˜6 42 1601	0.96	/CY						110					CY		110	CY	$ 106
	Plug Well Casing																			
	Spread Topsoil	Front End Loader 3 CY	31 23 ˜6 42 1601	0.96	/CY						792					CY		792	CY	$ 760
	Remove Barbed Wire	Fencing Barbed wire 3 strand	02 41 ˜3 60 1600	1.4	/LF	860										LF		860	LF	$ 1,204
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	per HR									8		HR		8	HR	$ 405
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									8		HR		8	HR	$ 112
	Subtotal																			$ 3,242
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ -
	Total																			**$ 3,242**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
48	**Degas Well G-7**																			
	Grading and Backfill	Frond End Loader 3 CY	31 23 16 42 1601	0.96	/CY						908					CY		908	CY	$ 872
	Fill Mud Pit	Backfill trench minimal haul 21/4 CY	31 23 16 42 1601	0.96	/CY						430					CY		430	CY	$ 413
	Plug Well Casing																			
	Spread Topsoil	Front End Loader	31 23 16 42 1601	0.96	/CY						2345					CY		2345	CY	$ 2,251
	Remove Barbed Wire	Fencing Barbed wire 3 strand	02 41 13 60 1600	1.4	/LF	1100										LF		1100	LF	$ 1,540
	Subtotal																			$ 5,076
	Foreman	Foreman Average, Outside	Foreman	50.65	hr									16		hr		16	hr	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		hr		16	hr	$ 223
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			$ 1,033
	Total																			**$ 6,109**

NOTES

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
49	**Degas Well G-9**																			
	Grading and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						575					CY		575	CY	$ 552
	Fill Mud Pit	Backfill Trench Minimal Haul 2 1/4 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Plug Well Casing	Concrete Ready Mix	03 31 13.35 0412	123	CY						21					CY		21	CY	$ 2,583
	Subtotal																			$ 3,548
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96							1574					CY		1574	CY	$ 1,511
	Subtotal																			$ 1,511
	Remove Fence	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	per LF	1300										LF		1300	LF	$ 1,820
	Subtotal																			$ 1,820
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			**$ 7,912**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
50	**Degas Well G-10**																			
	Grading and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						922					CY				$ -
	Fill Mud Pit	Backfill Trench Minimal Haul 2 1/4 CY	31 23 16 42 1601	0.96	CY						622					CY		622	CY	$ 597
	Subtotal																			$ 597
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	CY						21					CY		21	CY	$ 2,583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						2344					CY		2344	CY	$ 2,250
	Subtotal																			$ 2,250
	Remove Fence	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1200										LF		1200	LF	$ 1,680
	Subtotal																			$ 1,680
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			**$ 8,143**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
51	**Degas Well G-11**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						882					CY		882	CY	$ 847
	Fill in Mud Pit	Backfill Trench Minimal Haul 2 1/4 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,260
	Plug Well Casing																			
	Subtotal																			$ -
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						254					CY		254	CY	$ 244
	Subtotal																			$ 244
	Remove Fence	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	CY	1100										FT		1100	FT	$ 1,540
	Subtotal																			$ 1,540
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.92	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			**$ 4,077**

NOTES

INCORPORATED
AUG 0 2 '2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
52	**Degas Well G-12**																			
	Grading and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						429					CY		429	CY	$ 412
	Fill Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 825
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	CY						15					CY		15	CY	$ 1,845
	Subtotal																			$ 1,845
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						563					CY		563	CY	$ 540
	Subtotal																			$ 540
	Remove Fence	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	CY	1100										FT		1100	LF	$ 1,540
	Subtotal																			$ 1,540
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			**$ 5,783**

NOTES

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
53	**Degas Well G-13**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1393					CY		1393	CY	$ 1,337
	Fill in Mud Pit	Backfill Trench Minimal Haul 2 1/4 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,750
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	CY						21					CY		21	CY	$ 2,583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						2162					CY		2162	CY	$ 2,076
	Subtotal																			$ 2,076
	Remove Fence	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1300										LF		1300	LF	$ 1,820
	Subtotal																			$ 1,820
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			**$ 9,262**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
54	**Degas Well G-14**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						429					CY		429	CY	$ 412
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 825
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	CY						21					CY		21	CY	$ 2,583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1544				1544	CY		1544	CY	$ 1,482
	Subtotal																			$ 1,482
	Remove Fence	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1100										LF		1100	LF	$ 1,540
	Subtotal																			$ 1,540
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			$ 7,463

NOTES

INCORPORATED
AUG 0 2 '07
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
55	**Degas Well G-15**																			
	Grade and Backfill	Front end Loader 3 CY	31 23 16 42 1601	0.96	CY						1106					CY		1106	CY	$ 1,062
	Fill in Mud Pit	Front end Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,475
	Plug Well Casing																			
	Subtotal																			$ -
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1475					CY		1475	CY	$ 1,416
	Subtotal																			$ 1,416
	Fence																			
	Remove Barbed Wire	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1100										FT		1100	FT	$ 1,540
	Subtotal																			$ 1,540
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			$ 5,464

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Material	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
56	**Degas Well G-16**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						800					CY		800	CY	$ 768
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,181
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1092					CY		1092	CY	$ 1,048
	Subtotal																			$ 1,048
	Fence																			
	Remove Barbed Wire	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1100										LF		1100	LF	$ 1,540
	Subtotal																			$ 1,540
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			$ 7,385

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
57	**Degas Well G-17**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						756					CY		756	CY	$ 726
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,139
	Plug well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						797					CY		797	CY	$ 765
	Subtotal																			$ 765
	Fence																			
	Remove Barbed Wire	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1200										LF		1200	LF	$ 1,680
	Subtotal																			$ 1,680
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			**$ 7,200**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
58	**Degas Well G-18**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						6962					CY		6962	CY	$ 6,684
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 7,097
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						2195					CY		2195	CY	$ 2,107
	Subtotal																			$ 2,107
	Remove Barbed Wire Fence																			
		Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1300												1300	LF	$ 1,820
	Subtotal																			$ 1,820
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									24		HR		24	HR	$ 1,216
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									24		HR		24	HR	$ 335
	Subtotal																			$ 1,551
	Total																			**$ 15,158**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
59	**Degas Well G-19**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1393					CY		1393	CY	$ 1,337
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,750
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						2037					CY		2037	CY	$ 1,956
	Subtotal																			$ 1,956
	Fence																			
	Remove Barbed Wire	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1300										LF		1300	LF	$ 1,820
	Subtotal																			$ 1,820
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									16		HR		16	HR	$ 810
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									16		HR		16	HR	$ 223
	Subtotal																			$ 1,033
	Total																			$ 9,142

NOTES

INCORPORATED
AUG 0 2 '0
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
60	**Degas Well G-22 & Access Road**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						7386					CY		7386	CY	$ 7,091
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 7,504
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						2103							2103	CY	$ 2,019
	Subtotal																			$ 2,019
	Fence																			
	Remove Barbed Wire	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	LF	1300										LF		1300	LF	$ 1,820
	Subtotal																			$ 1,820
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									32		HR		32	HR	$ 1,621
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									32		HR		32	HR	$ 446
	Subtotal																			$ 2,067
	Total																			$ 15,993

NOTES

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
61	**Degas Well G-25**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1406					CY		1406	CY	$ 1,350
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,763
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1406					CY		1406	CY	$ 1,350
	Subtotal																			$ 1,350
	Fence																			
	Remove Barb Wire Fence	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	CY	1300										FT		1300	LF	$ 1,820
	Subtotal																			$ 1,820
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									24		HR		24	HR	$ 1,216
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									24		HR		24	HR	$ 335
	Subtotal																			$ 1,551
	Total																			$ 9,067

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Material	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
62	**Degas Well G-26**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1080					CY		1080	CY	$ 1,037
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,450
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1080					CY		1080	CY	$ 1,037
	Subtotal																			$ 1,037
	Fence																			
	Remove Barbed Wire	Fencing Barbed Wire 3 Strand	02 41 13 60 1600	1.4	CY	1300										LF		1300	LF	$ 1,820
	Subtotal																			$ 1,820
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									24		HR		24	HR	$ 1,216
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									24		HR		24	HR	$ 335
	Subtotal																			$ 1,551
	Total																			$ 8,441

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
63	**Degas Well G-30**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1479					CY		1479	CY	$ 1,420
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 1,833
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						1235					CY		1235	CY	$ 1,186
	Subtotal																			$ 1,186
	Fence																			
	Remove Barbed Wire	Fencing Barbed Wire 3 Strand	31 23 16 42 1601	0.96	LF	1300										LF		1300	LF	$ 1,248
	Subtotal																			$ 1,248
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									32		HR		32	HR	$ 1,621
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									32		HR		32	HR	$ 446
	Subtotal																			$ 2,067
	Total																			$ 8,917

NOTES

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
64	**Degas Well G-31**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						8470					CY		8470	CY	$ 8,131
	Fill in Mud Pit	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						430					CY		430	CY	$ 413
	Subtotal																			$ 8,544
	Plug Well Casing	Concrete Ready Mix 8000 psi	03 31 13.35 0412	123	/CY						21					CY		21	CY	2583
	Subtotal																			$ 2,583
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						4624					CY		4624	CY	$ 4,439
	Subtotal																			$ 4,439
	Fence																			
	Remove Fencing	Barbed Wire 3 Strand	31 23 16 42 1601	0.96	LF	1300										LF		1300	LF	$ 1,248
	Subtotal																			$ 1,248
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR									32		HR		32	HR	$ 1,621
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR									32		HR		32	HR	$ 446
	Subtotal																			$ 2,067
	Total																			**$ 18,881**

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
65	**AMV Road**																			
	Grade and Backfill	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						15207					CY		15207	CY	$ 14,599
	Subtotal																			$ 14,599
	Spread Topsoil	Front End Loader 3 CY	31 23 16 42 1601	0.96	CY						24374					CY		24374	CY	$ 23,399
	Subtotal																			$ 23,399
	Support																			
	Foreman	Foreman Average, Outside	Foreman	50.65	HR						150					HR		150	HR	$ 7,598
	4X4 Pickup	Equipment Rental	01 54 33 40 7200	13.95	/HR						150					HR		150	HR	$ 2,093
	Subtotal																			$ 9,691
	Subtotal																			$ -
	Total																			$ 47,689

NOTES

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Earth Line Item Subtotals

Ref.	Description	COST 2015 Dollars
1	Facilities Area 01	$ 420,784
2	Facilities Area 02	$ 177,914
3	Stream Channel 03	$ 48,919
5	Refuse Pile 05	$ 389,748
6	Backfill Shaft	$ 12,630
	Total	$1,049,995

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	COST 2015 Dollars
	Dugout Mine															
1	**Facilities Area 01**															
	Cut and Fill at Mine Site															
	Equipment															
	Rough Grading															
	D9R Semi-U EROPS (9-37) (2H2015)	24400	125.2	0.1	55.4	345.62	1	345.62	$/HR	118169	CY	184	CY/HR	642.2	HR	$ 221,957
	Finished Grading															
	D9R Semi-U EROPS (9-37) (2H2015)	24400	125.2	0.1	55.4	345.62	1	345.62	$/HR	19926	CY	680	CY/HR	29.3	HR	$ 10,127
	825H ((6-12) (2H2015))	17710	97.6	0.1	55.4	273.45	1	273.45	$/HR	58490	CY	876	CY/HR	66.8	HR	$ 18,266
	CAT 345D L(10-20)(2nd2015)	16105	104.75	0.1	55.4	271.28	1	271.28	$/HR	10000	CY	308	CY/HR	32.5	HR	$ 8,817
	966H EROPS (9-26) (2nd2015)	8250	57.8	0.1	55.4	170.54	1	170.54	$/HR	8342	CY	204	CY/HR	40.9	HR	$ 6,975
	Support Personnel and Labor															
	CLAB				42.65	42.65	1	42.65	$/HR					642.2	HR	$ 27,390
	5,000 gal H2O truck Diesel (20-15) (2nd2015)	5280	45.8	0.1	43.3	126.68	1	126.68	$/HR					642.2	HR	$ 81,354
	Pickup Truck Crew 4x4 1 ton (20-16) (2nd2015)	325	17.6	0.1	43.3	64.69	1	11.57	$/HR					642.2	HR	$ 7,430
	Foreman Average, Outside					59.9	1	59.9	$/HR					642.2	HR	$ 38,468
	Subtotal															$ 420,784

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.		Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	COST 2015 Dollars
	Dugout Mine															
2	**Facilities Area 02**															
	Topsoil Distribution															
	Move topsoil															
	D9R Semi-U EROPS (9-37) (2H2015)	24400	125.2	0.1	55.4	345.62	1	345.62	$/HR	21460	CY	184	CY/HR	116.6	HR	$ 40,299
	Pocking Handled in Vegetation Section															
	966H EROPS (9-26) (2nd2015)	8250	57.8	0.1	55.4	170.54	1	170.54	$/HR	21460	CY	204	CY/HR	105.2	HR	$ 17,941
	6X4 70,000lbs 12-18 CY (20-11) (2nd2015)	4430	57.4	0.1	43.3	134.13	6	804.78	$/HR	21460	CY	204	CY/HR	105.2	HR	$ 84,663
	Support Personnel and Labor															
	CLAB					49	1	49	$/HR					116.6	HR	$ 5,713
	5,000 gal H2O truck Diesel (20-15) (2nd2015)	5280	45.8	0.1	43.3	126.68	1	126.68	$/HR					116.6	HR	$ 14,771
	Pickup Truck Crew 4x4 1 ton (20-16) (2nd2015)	325	17.6	0.1	43.3	64.69	1	64.69	$/HR					116.6	HR	$ 7,543
	Foreman Average, Outside					59.9	1	59.9	$/HR					116.6	HR	$ 6,984
	Subtotal															**$ 177,914**

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.		Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	COST 2015 Dollars
	Dugout Mine															
3	**Stream Channel 03**															
	Remove Culvert and Restore Channel															
	CAT 345D L(10-20)(2nd2015)	16105	104.75	0.1	55.4	271.28	1	271.28	$/HR	14400	CY	310	CY/HR	46.5	HR	$ 12,615
	CLAB					42.65	0.5	21.33	$/HR					46.5	HR	$ 992
	966H EROPS (9-26) (2nd2015)	8250	57.8	0.1	55.4	170.54	1	170.54	$/HR	1500	CY	204	CY/HR	7.4	HR	$ 1,262
	CLAB					42.65	0.5	21.33	$/HR					7.4	HR	$ 158
	6X4 70,000lbs 12-18 CY (20-11) (2nd2015)	4430	57.4	0.1	43.3	134.13	1	134.13	$/HR	7000	CY	50	CY/HR	140	HR	$ 18,778
	CLAB					49	0.5	24.5	$/HR					140	HR	$ 3,430
	Support															
							1									$ -
	5,000 gal H2O truck Diesel (20-15) (2nd2015)	5280	45.8	0.1	43.3	126.68	1	126.68	$/HR					46.5	HR	$ 5,891
	Pickup Truck Crew 4x4 1 ton (20-16) (2nd2015)	325	17.6	0.1	43.3	64.69	1	64.69	$/HR					46.5	HR	$ 3,008
	Foreman Average, Outside					59.9	1	59.9	$/HR					46.5	HR	$ 2,785
	Subtotal															**$ 48,919**

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref		Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis	Units	COST 2015 Dollars
	Dugout Mine															
5	**Refuse Pile 05**															
	Cut and Fill Refuse Site															
	D9R Semi-U EROPS (9-37) (2H2015)	24400	125.2	0.1	55.4	345.62	1	345.62	$/HR	27556	CY	102	CY/HR	270.2	HR	$ 93,387
	5,000 gal H2O truck Diesel (20-15) (2nd2015)	5280	45.8	0.1	43.3	126.68	1	126.68	$/HR					270.2	HR	$ 34,229
							1									
	Foreman & 4X4 Pickup (20-16) (2nd2015)	325	17.6	0.1	50.65	72.04	1	72.04	$/HR					270.2	HR	$ 19,465
	Doze On-site Subsoil/Topsoil															
	D8R Series II (9-37) (2nd2015)	16865	89.55	0.1	55.4	213.03	1	213.03	$/HR	23060	CY	480	CY/HR	48	HR	$ 10,225
	Borrow Area Soils															
	Trucking Soil															
	CAT 345D L(10-20)(2nd2015)	16105	104.75	0.1	55.4	271.28	1	271.28	$/HR	57195		150	CY/HR	381.3	HR	$ 103,439
	6X4 70,000lbs 12-18 CY (20-11) (2nd2015)	4430	57.4	0.1	43.3	100.96	1.5	151.44	$/HR	57195		150	CY/HR	381.3	HR	$ 57,744
	Doze Trucked Subsoil															
	D8R Series II (9-37) (2nd2015)	16865	89.55	0.1	55.4	213.03	1	213.03	$/HR	57195		171	CY/HR	334.5	HR	$ 71,259
	Subtotal															**$ 389,748**

INCORPORATED
AUG 02 2016
Div. of Oil, Gas & Mining

Ref.		Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	COST 2015 Dollars
	Pace Canyon Fan Portal															
6	**Backfill Shaft**															
	CAT 345D L(10-20)(2nd2015)	16105	104.75	0.1	55.4	271.28	1	271.28	$/HR	641	CY	216	CY/HR	3	HR	$ 814
	6X4 70,000lbs 12-18 CY (20-11) (2nd2015)	4430	57.4	0.1	43.3	100.96	3	302.88						3	HR	$ 909
	Backfill Portal															
	D8R Series II (9-37) (2nd2015)	16865	89.55	0.1	55.4	213.03	1	213.03	$/HR	331	CY	171	CY/HR	1.9	HR	$ 405
	Subsoil Placement															
	D8R Series II (9-37) (2nd2015)	16865	89.55	0.1	55.4	213.03	1	213.03	$/HR	4045	CY	90	CY/HR	44.9	HR	$ 9,565
	Doze On -site Topsoil															
	D8R Series II (9-37) (2nd2015)	16865	89.55	0.1	55.4	213.03	1	213.03	$/HR	2128	CY	480	CY/HR	4.4	HR	$ 937
	Subtotal															**$ 12,630**

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Vegetation Line Item Subtotals

Ref.	Description	Cost 2015 Dollars
V-1	Dugout Mine Vegetation	$ 169,874
V-2	Dugout Mine Refuse Pile	$ 115,534
V-3	Pace Canyon Fan Portal	$ 8,173
V-4	Degas Well G2	$ 2,478
V-5	Degas Well G5	$ 2,282
V-6	Degas Well G6	$ 3,233
V-7	Degas Well G7	$ 2,661
V-8	Degas Well G9	$ 1,711
V-9	Degas Well G10	$ 1,598
V-10	Degas Well G11	$ 1,731
V-11	Degas Well G12	$ 1,749
V-12	Degas Well G13	$ 2,395
V-13	Degas Well G14	$ 2,166
V-14	Degas Well G15	$ 4,230
V-15	Degas Well G16	$ 3,507
V-16	Degas Well G17	$ 2,738
V-17	Degas Well G-18	$ 3,801
V-18	Degas Well G-19	$ 2,850
V-19	Degas Well G-22 and Access Road	$ 9,769
V-20	Degas Well G-25	$ 5,949
V-21	Degas Well G-26	$ 3,270
V-22	Degas Well G-30	$ 5,095
V-23	Degas Well G-31	$ 3,886
V-24	AMV Road	$ 74,885
	Total	**$435,566**

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-1	**Dugout Mine Vegetation**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					14.56						AC		23490	CY	$ 9,866
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					14.56						AC		23490	CY	$ 22,550
	Subtotal																			$ 32,416
	Fence																			
	Silt Fence	Wire Reinforced Silt Fence 3'x 100', 4' T Po	Maxwell Quote	0.55	ft	6800										FT		6800	FT	$ 3,740
	Subtotal																			$ 3,740
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					13.9						AC		605	MSF	$ 19,209
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					13.9						AC		13.9	AC	$ 7,318
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					13.9						AC		1	ton/AC	$ 8,799
	Tackifier	Tackifier	Tackifier	52.5	/AC					13.9						AC		13.9	AC	$ 730
	Transplant Area No 1																			
	Area																			
	Transplant Materials	Dugout Transplant Mix No 1	Dugout Transp 1	984.5	/AC					13.9						AC		13.9	AC	$ 13,685
	Transplant Labor	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0130	0.81	Ea										550	#/AC		7645	EA	$ 6,192
	Seed Mix No 2																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					2.45						AC		107	MSF	$ 3,397
	Hydro seed Material	Dugout Seed Mix No 2	Dugout Seed 2	414	/AC					2.45						AC		2.45	AC	$ 1,014
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					2.45						AC		1	ton/AC	$ 1,551
	Tackifier	Tackifier	Tackifier	52.5	/AC					2.45						AC		2.45	AC	$ 129
	Transplant Area No 2																			
	Area																			
	Transplant Materials	Dugout Transplant Mix #2	Dugout Transp 2	13,083	/AC					2.45						AC		2.45	AC	$ 32,052
	Transplant Labor	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0130	0.81	Ea										6500	#/AC		15925	EA	$ 12,899
	Subtotal																			$ 106,975
	Direct Vegetation																			$ 143,131
	Reseeding																			
	Assume 25% reveg rate																			$ 26,744
	Total																			$ 169,874

NOTE:

see maxwell supply quote

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-2	**Dugout Mine Refuse Pile**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	/CY					16.34						AC		26362	CY	$ 11,072
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					16.34						AC		26362	CY	$ 25,308
	Subtotal																			$ 36,380
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					16.34						AC		712	MSF	$ 22,606
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					16.34						AC		16.34	AC	$ 8,603
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					16.34						AC		15.6	ton/AC	$ 9,875
	Tackifier	Tackifier	Tackifier	52.5	/AC					16.34						AC		16.34	AC	$ 858
	Transplant Area No 1																			
	Area																			
	Transplant Materials	Dugout Transplant Mix No 1	Dugout Transp 1	984.5	/AC					16.34						AC		16.34	AC	$ 16,087
	Transplant Labor	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0130	0.81	Ea										400	#/AC		6536	EA	$ 5,294
	Subtotal																			$ 63,323
	Reseeding																			
	Assume 25% reveg rate																			$ 15,831
	Total																			**$ 115,534**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-3	**Pace Canyon Fan Portal**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					1.5						AC		2420	CY	$ 1,016
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					1.5						AC		2420	CY	$ 2,323
	Subtotal																			$ 3,339
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					1.5						AC		65	MSF	$ 2,064
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					1.5						AC		1.5	AC	$ 790
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					1.5						AC		1.5	ton/AC	$ 950
	Tackifier	Tackifier	Tackifier	52.5	/AC					1.5						AC		1.5	AC	$ 79
	Subtotal																			$ 3,883
	Direct Vegetation																			$ 7,222
	Reseeding																			
	Assume 25% reveg rate																			$ 951
	Total																			**$ 8,173**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Seed Factor	Quantity	Unit	Cost
V-4	**Degas Well G2**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.45						AC		726	CY	$ 305
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.45						AC		726	CY	$ 697
	Subtotal																			$ 1,002
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.45						AC		20	MSF	$ 635
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.45						AC		0.45	AC	$ 237
	Hay Mulch	Hay 1" material only	31 25 14.16 1200	633	TON					0.45						AC		0.45	ton/AC	$ 285
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.45						AC		0.45	AC	$ 24
	Subtotal																			$ 1,181
	Direct Vegetation																			$ 2,183
	Reseeding																			
	Assume 25% reveg rate																			$ 295
	Total																			$ 2,478

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-5	**Degas Well G5**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.42						AC		678	CY	$ 285
	Packing	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.42						AC		678	CY	$ 651
	Subtotal																			$ 936
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.42						AC		18	MSF	$ 572
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.42						AC		0.42	AC	$ 221
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.42						AC		0.42	ton/AC	$ 266
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.42						AC		0.42	AC	$ 22
	Subtotal																			$ 1,081
	Direct Vegetation																			$ 2,017
	Reseeding																			
	Assume 25% reveg rate																			$ 265
	Total																			**$ 2,282**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-6	**Degas Well G6**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.59						AC		952	CY	$ 400
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.59						AC		952	CY	$ 914
	Subtotal																			$ 1,314
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.59						AC		26	MSF	$ 826
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.59						AC		0.59	AC	$ 311
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.59						AC		0.59	ton/AC	$ 373
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.59						AC		0.59	AC	31
	Subtotal																			$ 1,541
	Direct Vegetation																			$ 2,855
	Reseeding																			
	Assume 25% reveg rate																			$ 378
	Total																			**$ 3,233**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-7	**Degas Well G7**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.49						AC		791	CY	$ 332
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.49						AC		791	CY	$ 759
	Subtotal																			$ 1,091
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.49						AC		21	MSF	$ 667
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.49						AC		0.49	AC	$ 258
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.49						AC		1	ton/AC	$ 310
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.49						AC		0.49	AC	$ 26
	Subtotal																			$ 1,261
	Direct Vegetation																			$ 2,352
	Reseeding																			
	Assume 25% reveg rate																			$ 309
	Total																			$ 2,661

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-8	**Degas Well G9**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.31						AC		500	CY	$ 210
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.31						AC		500	CY	$ 480
	Subtotal																			$ 690
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.31						AC		14	MSF	$ 445
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.31						AC		0.31	AC	$ 163
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.31						AC		0.31	ton/AC	$ 196
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.31						AC		0.31	AC	$ 16
	Subtotal																			$ 820
	Direct Vegetation																			$ 1,510
	Reseeding																			
	Assume 25% reveg rate																			$ 201
	Total																			**$ 1,711**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-9	**Degas Well G10**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.29						AC		468	CY	$ 197
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.29						AC		468	CY	$ 449
	Subtotal																			$ 645
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.29						AC		13	MSF	$ 413
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.29						AC		0.29	AC	$ 153
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.29						AC		0.29	ton/AC	$ 184
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.29						AC		0.29	AC	$ 15
	Subtotal																			$ 765
	Direct Vegetation																			$ 1,411
	Reseeding																			
	Assume 25% reveg rate																			$ 187
	Total																			**$ 1,598**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-10	**Degas Well G11**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.32						AC		516	CY	$ 217
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.32						AC		516	CY	$ 495
	Subtotal																			$ 712
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.32						AC		14	MSF	$ 445
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.32						AC		0.32	AC	$ 168
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.32						AC		0.32	ton/AC	$ 203
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.32						AC		0.32	AC	$ 17
	Subtotal																			$ 816
	Direct Vegetation																			$ 1,528
	Reseeding																			
	Assume 25% reveg rate																			$ 204
	Total																			**$ 1,731**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Material	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-11	**Degas Well G12**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.32						AC		516	CY	$ 217
	Packing	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.32						AC		516	CY	$ 495
	Subtotal																			$ 712
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.32						AC		14	MSF	$ 445
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.32						AC		0.32	AC	$ 168
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.32						AC		0.32	ton/AC	$ 203
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.32						AC		0.32	AC	$ 17
	Subtotal																			$ 833
	Direct Vegetation																			$ 1,545
	Reseeding																			
	Assume 25% reveg rate																			$ 204
	Total																			**$ 1,749**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Material	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-12	**Degas Well G13**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.44						AC		710	CY	$ 298
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.44						AC		710	CY	$ 682
	Subtotal																			$ 980
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5600	31.75	/MSF					0.44						AC		19	MSF	$ 603
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.44						AC		0.44	AC	$ 232
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.44						AC		0.44	ton/AC	$ 279
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.44						AC		0.44	AC	$ 23
	Subtotal																			$ 1,137
	Direct Vegetation																			$ 2,117
	Reseeding																			
	Assume 25% reveg rate																			$ 278
	Total																			**$ 2,395**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-13	**Degas Well G14**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.4						AC		645	CY	$ 271
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.4						AC		645	CY	$ 619
	Subtotal																			$ 890
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.4						AC		17	MSF	$ 540
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.4						AC		0.4	AC	$ 211
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.4						AC		0.4	ton/AC	$ 253
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.4						AC		0.4	AC	$ 21
	Subtotal																			$ 1,025
	Direct Vegetation																			$ 1,915
	Reseeding																			
	Assume 25% reveg rate																			$ 251
	Total																			**$ 2,166**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 '07
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-14	**Degas Well G15**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.77						AC		1242	CY	$ 522
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.77						AC		1242	CY	$ 1,192
	Subtotal																			$ 1,714
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.77						AC		34	MSF	$ 1,080
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.77						AC		0.77	AC	$ 405
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.77						AC		0.77	ton/AC	$ 487
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.77						AC		0.77	AC	$ 40
	Subtotal																			$ 2,012
	Direct Vegetation																			$ 3,726
	Reseeding																			
	Assume 25% reveg rate																			$ 503
	Total																			**$ 4,230**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-15	**Degas Well G16**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.64						AC		1033	CY	$ 434
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.64						AC		1033	CY	$ 992
	Subtotal																			$ 1,426
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.64						AC		28	MSF	$ 889
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.64						AC		0.64	AC	$ 337
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.64						AC		0.64	ton/AC	$ 405
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.64						AC		0.64	AC	$ 34
	Subtotal																			$ 1,665
	Direct Vegetation																			$ 3,091
	Reseeding																			
	Assume 25% reveg rate																			$ 416
	Total																			**$ 3,507**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-16	**Degas Well G17**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.5						AC		807	CY	$ 339
	Packing	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	/CY					0.5						AC		807	CY	$ 775
	Subtotal																			$ 1,114
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	/MSF					0.5						AC		22	MSF	$ 699
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	/AC					0.5						AC		0.5	AC	$ 263
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.5						AC		0.5	ton/AC	$ 317
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.5						AC		0.5	AC	$ 26
	Subtotal																			$ 1,305
	Direct Vegetation																			$ 2,419
	Reseeding																			
	Assume 25% reveg rate																			$ 320
	Total																			**$ 2,738**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

REF	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-17	**Degas Well G-18**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.7						AC		1129	CY	$ 474
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	CY					0.7						AC		1129	CY	$ 1,084
	Subtotal																			$ 1,558
	Seed Mix No !																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	MSF					0.7						AC		30	MSF	$ 953
	Hydro seed Material	Dugout Seed Mix No. 1	Dugout Seed 1	526.5	AC					0.7						AC		0.7	AC	$ 369
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	Ton					0.7						AC		0.7	Ton/AC	$ 443
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.7						AC		0.7	AC	$ 37
	Subtotal																			$ 1,802
	Direct Vegetation																			$ 3,360
	Reseeding																			
	Assume 25% reveg rate																			$ 441
	Total																			**$ 3,801**

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

REF	Description	Materials	Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-18	**Degas Well G-19**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.52						AC		839	CY	$ 352
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	CY					0.52						AC		839	CY	$ 805
	Subtotal																			$ 1,157
	Seed Mix No !																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	MSF					0.52						AC		23	MSF	$ 730
	Hydro seed Material	Dugout Seed Mix No. 1	Dugout Seed 1	526.5	AC					0.52						AC		0.52	AC	$ 274
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	Ton					0.52						AC		0.52	Ton/AC	$ 329
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.52						AC		0.52	AC	$ 27
	Subtotal																			$ 1,360
	Direct Vegetation																			$ 2,517
	Reseeding																			
	Assume 25% reveg rate																			$ 333
	Total																			$ 2,850

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-19	**Degas Well G-22 and Access Road**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					1.79						AC		2888	CY	$ 1,213
	Pocking	Excavation Bulk Bank 3CY	31 23 16 42 1601	0.96	CY					1.79						AC		2888	CY	$ 2,772
	Subtotal																			$ 3,985
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	MSF					1.79						AC		78	MSF	$ 2,477
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	AC					1.79						AC		1.79	AC	$ 942
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					1.79						AC		1.79	TON/AC	$ 1,133
	Tackifier	Tackifier	Tackifier	52.5	/AC					1.79						AC		1.79	AC	$ 94
	Subtotal																			$ 4,646
	Direct Vegetation																			$ 8,631
	Reseeding																			
	Assume 25% Reveg Rate																			$ 1,138
	Subtotal																			
	Total																			**$ 9,769**

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Ref.	Description	Material	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-20	**Degas Well G-25**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					1.8						AC		2904	CY	$ 1,220
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	CY					1.8						AC		2904	CY	$ 2,788
	Subtotal																			$ 4,008
	Seed Mix No 1																			
	Hydro seed Equipment & Labor	Hydro Seeding, Mulch & Fertilize	32 92 19.14 5800	31.75	MSF					0.6						AC		26	MSF	$ 826
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.6						AC		0.6	TON/AC	$ 380
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	AC					0.6						AC		0.6	AC	$ 316
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.6						AC		0.6	AC	$ 32
	Subtotal																			$ 1,553
	Direct Vegetation																			$ 5,561
	Reseeding																			
	Assume 25% Reveg Rate																			$ 388
	Total																			$ 5,949

NOTE:

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Num	Unit	Swell Factor	Quantity	Unit	Cost
V-21	**Degas Well G-26**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.6						AC		968	CY	$ 407
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	CY					0.6						AC		968	CY	$ 929
	Subtotal																			$ 1,336
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	MSF					0.6						MSF		26	MSF	$ 826
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.6						TON/AC		0.6	AC	$ 380
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	AC					0.6						AC		0.6	AC	$ 316
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.6						AC		0.6	AC	$ 32
	Subtotal																			$ 1,553
	Direct Vegetation																			$ 2,889
	Reseeding																			
	Assume 25 % Reveg Rate																			$ 380
	Subtotal																			
	Total																			$ 3,270

NOTE:

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-22	**Degas Well G-30**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.93						AC		1500	CY	$ 630
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	CY					0.93						AC		1500	CY	$ 1,440
	Subtotal																			$ 2,070
	Seed Mix No1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertiliz	32 92 19.14 5800	31.75	MSF					0.93						AC		41	MSF	$ 1,302
	Hay Mulch	Hay 1"	31 25 14.16 1200	633	TON					0.93						AC		0.93	Ton/AC	$ 589
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	AC					0.93						AC		0.93	AC	$ 490
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.93						AC		0.93	AC	$ 49
	Subtotal																			$ 2,430
	Direct Vegetation																			$ 4,500
	Reseeding																			
	Assume 25 % Reveg Rate																			$ 595
	Total																			**$ 5,095**

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-23	**Degas Well G-31**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					0.71						AC		1145	CY	$ 481
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	CY					0.71					1.75	AC		1145	CY	$ 1,099
	Subtotal																			$ 1,580
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	MSF					0.71					1.75	AC		31	MSF	$ 984
	Hay Mulch	Hay 1 "	31 25 14.16 1200	633	TON					0.71					1.75	AC		0.71	TON/AC	$ 449
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	AC					0.71					1.75	AC		0.71	AC	$ 374
	Tackifier	Tackifier	Tackifier	52.5	/AC					0.71						AC		0.71	AC	$ 37
	Subtotal																			$ 1,844
	Direct Vegetation																			$ 3,424
	Reseeding																			
	Assume 25 % Reveg Rate																			$ 461
	Subtotal																			
	Total																			**$ 3,886**

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
V-24	**AMV Road**																			
	Soil Preparation	Ripping	31 23 16.32 2820	0.42	BCY					13.72						AC		22135	CY	$ 9,297
	Pocking	Excavation Bulk Bank 3 CY	31 23 16 42 1601	0.96	CY					13.72						AC		22135	CY	$ 21,250
	Subtotal																			$ 30,547
	Seed Mix No 1																			
	Hydro seed Equipment and Labor	Hydro Seeding, Mulch & Fertilizer	32 92 19.14 5800	31.75	MSF					13.72						AC		598	MSF	$ 18,987
	Hydro seed Material	Dugout Seed Mix No 1	Dugout Seed 1	526.5	AC					13.72						AC		13.72	AC	$ 7,224
	Hay Mulch	Hay 1 "	31 25 14.16 1200	633	TON					13.72						AC		13.72	Ton/AC	$ 8,685
	Tackifier	Tackifier	Tackifier	52.5	/AC					13.72						AC		13.72	AC	$ 720
	Subtotal																			$ 35,615
	Direct Vegetation																			$ 66,161.44
	Subtotal																			
	Reseeding																			
	Assume 25 % Reveg Rate																			$ 8,724
	Total																			$ 74,885

NOTE:

Area reflects disturbed acreage as surveyed by Cody Ware of Ware Surveying

RECEIVED
AUG 0 2 2017
Div. of Oil, Gas & Mining

Dugout M&RP, Methane Degasification Amendment

Chapter 1

Pages 1-2, 1-7

Figure 1-1

Dugout Canyon Mine Permit Number C/007/039

Canyon Fuel Company

CLEAN COPIES

Title page for reference only

TABLE 1-1

Degas Well Locations

Pine Canyon, Utah Quadrangle, Salt Lake Meridian

Hole Number	Section	Township and Range
G-1	Portion of N1/2SE1/4NW1/4 Section 24	Township 13 South, Range 12 East
G-2	Portion of N1/2SW1/4NE1/4 Section 24	Township 13 South, Range 12 East
G-5	Portion of N1/2NW1/4NE1/4 Section 24	Township 13 South, Range 12 East
G-6	Portion of S1/2SW1/4NW1/4 Section 18	Township 13 South, Range 13 East
G-7	Portion of SW1/4NE1/4SE14 Section 24	Township 13 South, Range 12 East
G-8	Portion of NE1/4NE1/4NE14 Section 26	Township 13 South, Range 12 East
G-9	Portion of NW1/4NW1/4SW1/4 Section 21	Township 13 South, Range 13 East
G-10	Portion of NE1/4NE1/4SE1/4 Section 20	Township 13 South, Range 13 East
G-11	Portion of NE1/4SE1/4SW1/4 Section 20	Township 13 South, Range 13 East
G-12	Portion of SE1/4NW1/4SW1/4 Section 20	Township 13 South, Range 13 East
G-13	Portion of NW1/4NE1/4SE1/4 Section 19	Township 13 South, Range 13 East
G-14	Portion of SW1/4SW1/4SE1/4 Section 17	Township 13 South, Range 13 East
G-15	Portion of NW1/4SE1/4NE1/4 Section 19	Township 13 South, Range 13 East
G-16	Portion of SW1/4SE1/4SE1/4 Section 18	Township 13 South, Range 13 East
G-17	Portion of SE1/4NW1/4SE1/4 Section 18	Township 13 South, Range 13 East
G-18	Portion of NE1/4SE1/4NW1/4 Section 20	Township 13 South, Range 13 East
G-19	Portion of SW1/4NW1/4SE1/4 Section 20	Township 13 South, Range 13 East
G-22	Portion of NE1/4SE1/4SE1/4 Section 18	Township 13 South, Range 13 East
Access Rd.	Portions of SE1/4 Section 18	Township 13 South, Range 13 East
G-25	Portion of SW1/4SE1/4SE1/4Section 20	Township 13 South, Range 13 East
G-26	Portion of NE1/4NE1/4NW1/4Section 29	Township 13 South, Range 13 East
G-29	Portion of NW1/4NW1/4NE1/4Section 29	Township 13 South, Range 13 East

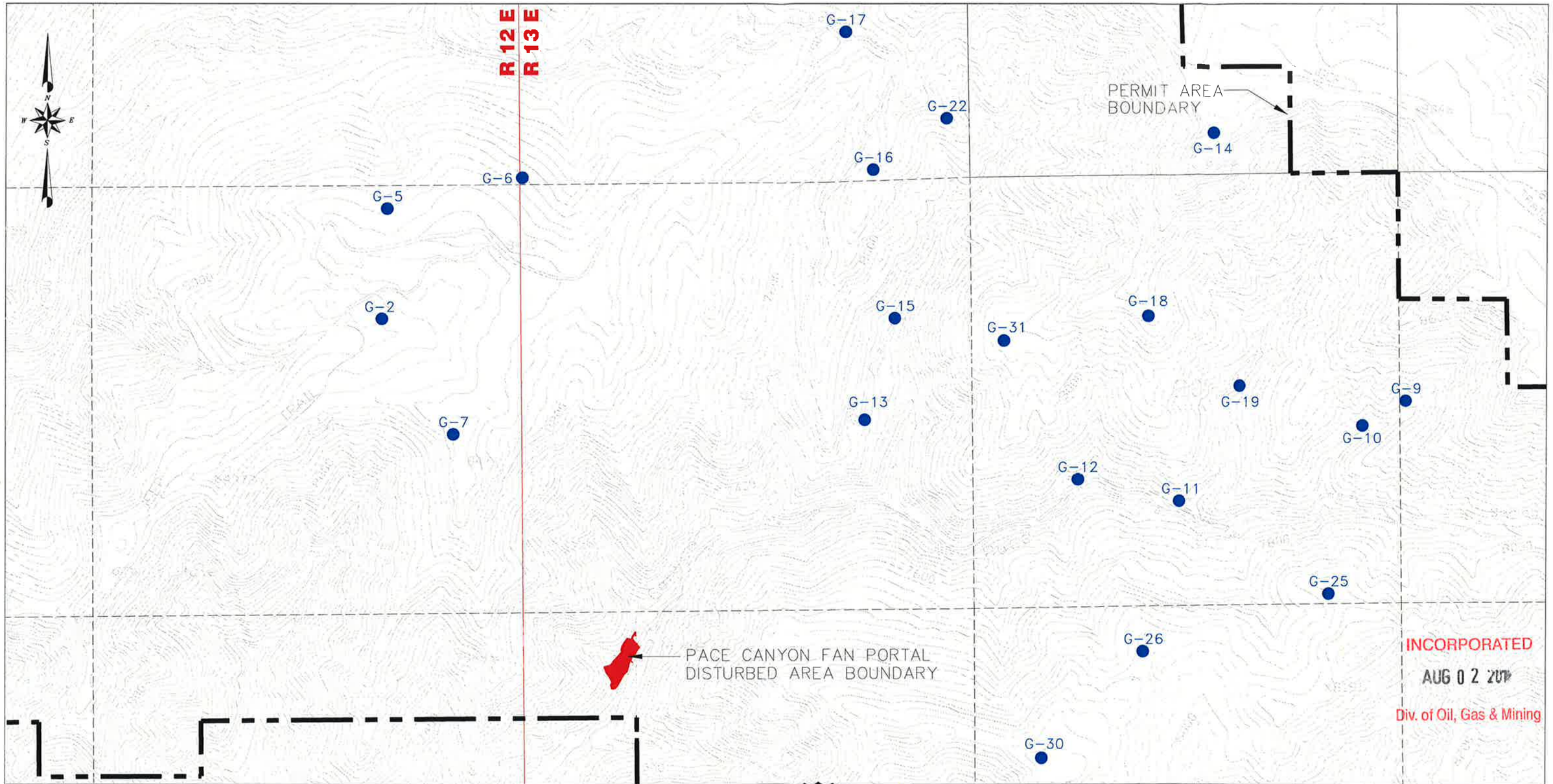
INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

TABLE 1-2

Disturbed Acres by Well Site

Well Site	Permitted Disturbed Acres	Surveyed Disturbed Acres*
G-1	0.6	Not Constructed
G-2	1.21	0.45
G-5	0.75	0.42
G-6	0.32	0.59
G-7	1.25	0.49
G-8	0.9	Not Constructed
G-9	2.2	0.31
G-10	1.7	0.29
G-11	1.6	0.32
G-12	2	0.32
G-13	2.75	0.44
G-14	2	0.40
G-15	2.5	0.77
G-16	2	0.64
G-17	1.25	Not surveyed
G-18	1.4	0.70
G-19	2.3	0.52
G-22 and Access Road	3.5	1.79
G-25	1.8	0.60
G-26	1.8	0.60
G-29	2	Not Constructed
G-30	2	0.93

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining



INCORPORATED
AUG 0 2 2017
Div. of Oil, Gas & Mining

EarthFax

0' 1200'

TOWNSHIP 13 SOUTH

REGISTERED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
8/18/16
STATE OF UTAH

REVISIONS OR UP-DATES		
NO.	DATE	BY
1	7/15/16	BK
2	8/12/16	BK
3	8/18/16	BK

DATE:	
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
SCALE:	

Fig1-1-bhl.Dwg

Canyon Fuel Company, LLC
Dugout Canyon Mine

Methane Degas Bore Hole Locations

P.O BOX 1029
WELLINGTON, UTAH 84542

DRAWING OR MAP NUMBER
Figure 1-1

Dugout M&RP, Methane Degasification Amendment

Chapter 2

Pages: 2-2, 2-4, 2-5, 2-11, 2-14, 2-19, 2-20, 2-23

Attachment 2-4

Dugout Canyon Mine Permit Number C/007/039

Canyon Fuel Company

CLEAN COPIES

Title page for reference only

Dugout Canyon Mine

DAWGS

Developing Awareness While Generating Safety

2004 and is incorporated into Attachment 2-1. Soil information for Well G-7 is incorporated into Attachment 2-1. A photograph of the G-7 site is included in Attachment 3-1.

The soils report prepared by Dan Larsen, Soil Scientist for wells G-8 thru G-13 is provided in Attachment 2-1. Wells are being permitted in groups: G-8 thru G-10, G-11 thru G-12 and G-13 thru G-17.

222.200 Soil Identification

Well No.	Soil Map Unit	Soil Components
G-1	62/88	Midfork-Comodore complex, Rabbitex-Datino Varient
G-2	7	Brycan, Beje-Trag complex, 3-30% slopes
G-5	103	Senchert-Croydon
G-6	62	Midfork-Comodore complex
G-7	7	Beje-Trag complex, 3-30% slopes
G-8	21	Croydon Loam, 8 to 30% slopes
G-9	97/62	Midfork-Comodore complex, Rottulee family-Trag complex
G-10	97	Rottulee family-Trag complex
G-11	11, 26	Cabba- family, 40 to 70 percent slopes, Doney family, 50 to 70 percent slopes
G-12	47, 88	Guben-Rock outcrop complex, Rabbitex family-Datino Variant complex
G-13	23	Curecanti family
G-14	62	Midfork family - Comodore complex

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

TABLE 2-1

Topsoil Volumes*

Well No.	Cubic Yards of Material
G-1	415
G-2	3,104
G-5	1,909
G-6	792
G-7	1251
G-8	543
G-9	1,574
G-10	2,344
G-11	254
G-12	563
G-13	2,162
G-14	1,544
G-15	1,475
G-16	1,092
G-17	797
G-18	2,195
G-19	2,037
G-22 & Access Road	2,103
G-25	1,081
G-26	927
G-29	1,363
G-30	1,235
G-31	4,624

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Access Road	9,167

* These total do not include soil salvaged from short roads accessing well sites which is bladed to the side of the road.

Figure 5-1 through Figure 5-25 show the layout and approximate size of well pads for G-1 thru G-6. Figures 5-27 thru 5-29 show the layout and size for well G-7. The figures for wells G-8 thru G-19, G-22 (Including access road), G-25,G-26, G-29, G-30 and G-31 are located in Attachment 5-1. Topsoil volume calculations can be found in Attachment 2-2.

Estimated topsoil salvage from the G-1 well site will average about 7". This site on a ridge top has previously been disturbed for exploration drilling. The site has pockets of fractured sandstone bedrock at the surface and stony subsoils, which are the limiting factors in the quantity of salvageable topsoil. The average topsoil depth at well site G-2 is 30". The average salvageable topsoil at well site G-5 is 22". Well site G-6 will be established on a pre-existing drill pad, with a portion of the new pad extending onto undisturbed area. Topsoil on the pre-existing drill pad ranges from 0 to 30 inches, on the north edge in from 20 to 28 inches and on the cut slope on the south edge from 6 to 30 inches. The slope will be restored to original contour with the application of topsoil, the entire site will receive at least 12 inches of topsoil. Twelve inches was used to calculate the volume of topsoil to be salvaged and to determine the size of the topsoil pile for drill site G-6. Topsoil available for salvage at G-7 has been estimated to be 10 to 12 inches. Available topsoil will be salvaged and if necessary some subsoils will be stripped with the topsoil to generate the required volume to place a minimum of 12 inches during site reclamation. Available topsoil at each site will be salvaged, stockpiled and redistributed.

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

The approximate volume of subsoil to be salvaged and used to create berms around the perimeter of the well site including the topsoil stockpile perimeter is: G-1 - 161 CY; G-2 - 254 CY, G-5 - 191 CY, G-6 - 156 CY, G-7 - 107 CY, G-8 - 143 CY, G-9 - 182 CY, G-10 - 137 CY, G-11 - 185 CY, G-12 - 260 CY, G-13 - 142 CY, G-14A - 123 CY, G-15 - 101 CY, G-16 - 98 CY, G-18 - 39 CY excludes topsoil pile, G-19 - 48 CY, G-22 and Access Road - 140 CY, G-25 - 136 and G-26 - 152, G-29 - 219 CY, G-30 - 244CY, G-31 - 62 CY excludes topsoil pile, Topsoil Stockpiles T-2 thru T10 - 300 CY and Access Road - 248 CY.

At the G-19 drill pad there is a variance between the disturbed area acreage and the acreage where topsoil will be salvaged. Portions of the site have no topsoil, due to previous disturbance by logging, these areas include roads, a gully and skid trails. In addition there is a perimeter buffer area that will not be disturbed and thus will not have topsoil removed from the area unless it becomes necessary due to unforseen issues during construction, such as buried outcrops, large boulders, tree root systems, etc. An area within the northeastern portion of the disturbed area has two road forks extending from the end of the existing road, these two forks have no topsoil on them and the area between them will not be disturbed and therefore will not have topsoil salvaged. A sketch of these areas is located in Attachment 2-1.

There is a difference between the topsoil volumes totals and the estimated inches to be salvaged on pads G-18, G-31 and the AMV road. The topsoil volume totals assume that the entire disturbed area will be stripped of 12 inches of topsoil/growth medium. Any areas within the disturbed area boundary which can remain undisturbed will remain undisturbed. In addition, the soils to be salvaged are assumed to be the same depth as the test pit or 12 inches. The available soil for salvage is likely to vary throughout the areas to be salvaged. A commitment is made to salvage available topsoil or 12 inches of growth medium. Sketches of the well pads are included in Attachment 2-1.

The topsoil for the G-22 pad and access road is stored on the permitted pad of G-17. The soils are stored on a wide turnout on an existing road in an area immediately adjacent to an existing soil

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

TABLE 2-2

Topsoil Stockpile Dimensions*

Well No.	Length (ft)	Width (ft)	Height (ft)
G-1	55	35	16
G-2	156	50	20
G-5	90	65	21
G-6	105	30	13
G-7	80	70	6 to12
G-8	168	60	6
G-9	160	90	30
G-10	170	80	65
G-11	40	50	12
G-12	60	80	18
G-13	120	100	17
G-14A	120	60	11
G-15	Pad	90	90
G-16	Pad	100	80
G-17	Pad	85	55
G-18	T-10	118	80
G-19	Lower Road	235	8
	Pad	140	52
G-22 and Access Road	Pad & Road	85	65
G-25	Pad	191	40

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

240 RECLAMATION PLAN

As-built cross section where both horizontal and vertical scales are equal and an as-built road profile were provided following completion of the AMV road construction. The AMV as-built road cross sections are provided on Plates 2 and 3 in Attachment 5-4.

241 General Information

Reclamation of the degassification sites (topsoil redistribution, amendments, and stabilization) is discussed in Sections 242, 243, and 244 respectively.

242 Soil Redistribution

242.100 Soil Redistribution Practices

The topsoil will be placed after recontouring of the site has occurred. Topsoil will be handled when they are loose or in a friable condition. The moisture content will be visually monitored and water will be added as needed to enhance the soil's condition for handling. The approximate amount of topsoil available for each site is shown in Table 2-1. The reclamation time line can be found on Figure 5-15 for sites G-2 and on Figure 5-26 for sites G-5 thru G-19, G-22 (including access road), G-25, G-26, G-29 , G-30 and G-31. Figure 5-26 has been revised to include the access road (AMV).

The topsoil will be distributed in two phases at well site G-2, the first phase will be the contemporaneous reclamation of a portion of the pad area used during well construction (see Figures 5-4, 5-8 and 5-12). During contemporaneous reclamation topsoil from the stockpile will be distributed in the depths shown in Table 2-3.

Final reclamation will occur at all well sites after venting of the methane gas is complete, venting equipment has been removed and the well has been plugged. Well plugging will be delayed at well

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

sites G-2, G-5 and G-7, to allow additional time for venting of the gob behind the sealed panels and to provide surface access to the mine. The surface at well sites G-2 and G-5 will be reclaimed in 2007/2008, however the wells will not be plugged. The surface at well site G-7 will be reclaimed in 2008, but the wells will not be plugged. The topsoil stockpile storage area and access road (G-2 and G-5) will be reclaimed during this final phase. The access roads to G-6, G-7, G-8, G-9, G-10, G-11, and G-12 are pre-existing and will not be reclaimed.

The topsoil stockpile storage area and access road (G-2, G-5 and G-22) will be reclaimed following the plugging of the wells . The access roads to G-6, G-7, G-8, G-9, G-10, G-11, G-12, G-13, G-15, G-17, G-19, G-25, G-26, G-29 and G-30 are pre-existing and will not be reclaimed. The access road joining the pre-existing road to G-16 and the portion of the access road between the topsoil stockpile and the well site at G-14 will be pocked/gouged and seeded during final reclamation of the site.

The AMV access road will be reclaimed using the technology discussed in Section 240 of this amendment following the sealing and reclamation of well pads G-18 and G-31. The G-22 access road will be reclaimed using the technology discussed in Section 240 of this amendment following the sealing and reclamation of well pad G-22.

Refer to Section 341 for additional information.

Soil Thickness - The topsoil will be distributed during contemporaneous and final reclamation in the thickness shown in Table 2-3.

Compaction - Prior to the application of topsoil, compacted subsoils will be roughened or loosened for a depth of 18 to 24 inches. To prevent compaction of topsoil, soil moving equipment will refrain from unnecessary operation over spread topsoil. The topsoil will be in a loosened condition prior to seeding.

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

TABLE 2-3

Approximate Topsoil Distribution Thickness

Well Site No.	Topsoil Thickness (Inches)
G-1*	7
G-2	30
G-5	22
G-6	12
G-7	12
G-8*	12
G-9	12
G-10	18
G-11	12
G-12	15
G-13	14 - 16
G-14A	14 - 16
G-15	14
G-16	14
G-17	12
G-18	12
G-19	12
G-22, Access Road	10 - 13
G-25	12
G-26	12
G-29	12
G-30	10
G-31	15

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Attachment 2-4

Well No.	Year Constructed		Year Plugged		Contemporaneous Reclamation		Final Reclamation		Bond Release Phases
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Actual
G-2		2004		2009	2007			2009	Phase I & II
G-3		2004		2005		2005		2005	Phase I, II & III
G-4		2004		2005				2005	Phase I, II & III
G-5		2004		2009	2007			2009	Phase I & II
G-6		2004		2005				2007	Phase I & II
G-7		2005		2008/2009	2007			2009	Phase I & II
G-9		2005		2008	2008		2010	2012	Phase I
G-10		2006		2008	2007		2010	2010	Phase I & II
G-11		2006		2008	2008		2015		
G-12		2006		2009	2007		2010	2011	Phase I & II
G-13		2006		2008	2008			2009	Phase I & II
G-14		2006	2010 (B)	2009 (A)	2008		2010	2010	Phase I & II
G-15*	N/A				2008		2015	2015	
G-16		2008					2011	2013	Phase I & II
G-17*	N/A						2014	2014	
G-18		2007	2010	2008 (A)	2009		2010	2012	Phase I & II
G-19		2007		2008	2008		2010	2010	Phase I
G-22		2008					2011	2013	Phase I
G-25		2009					2013	2013	Phase I
G-26		2009					2013	2013	Phase I
G-30	2010							2013	Phase I
G-31		2007	2010	2008 (A)	2009		2011	2013	Phase I & II

Dates are approximate, all events are subject to availability of contractors, weather, mining needs, etc.
Although permitted, wells G-1, G-8 and G-29 were never drilled/constructed
*Sites were not drilled but received minor disturbance

Attachment 5-2 and
Attachment 2-4

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Dugout M&RP, Methane Degasification Amendment

Chapter 3

Pages: 3-2, 3-4, 3-5, 3-13, 3-17, 3-25

Dugout Canyon Mine Permit Number C/007/039

Canyon Fuel Company

CLEAN COPIES

Title page for reference only

Dugout Canyon Mine

DAWGS

Developing Awareness While Generating Safety

321.100 Plant Communities Within the Proposed Permit Area

During June 2003, the degassification well sites were surveyed by Patrick Collins, Mt. Nebo Scientific. The report and survey for the areas are included in Attachment 3-1. The site for G-6 was moved to a pre-disturbed exploration well pad, the plant communities described in Mr. Collins report reflect the undisturbed portions on the north and south edges of the well pad. Vegetation information for G-7 was obtained from a report prepared by the NRCS Range Management Specialist, Dean Stacy (refer to Attachment 2-1 and 3-1) and the Patrick Collins survey prepared for well site G-3 (Phase III Reclaimed). A photograph of the G-7 site is included in Attachment 3-1.

A vegetation survey of well sites G-8 thru G-12 was completed in July 2005 by Patrick Collins, Mt. Nebo Scientific. These sites have all been pre-disturbed, with a road running through the center of G-8 and remnants of logging activity at both G-9 and G-10. Approximately fifty percent of the well pads at sites G-11 and G-12 are existing roads which have no topsoil or vegetation. The remaining area at site G-11 has been disturbed, except for a small portion on the west side of the site. Well site G-12 has evidence of disturbance above the road cut however both soil and vegetation are intact. The reports and surveys for the areas will be included in Attachment 3-1.

The vegetation survey of well sites G-13 thru G-17 were completed between July and September 2005. The reports and surveys for the areas are included in Attachment 3-1. At well site G-13, the surface ranges from relatively smooth and non-stoney to very stoney. Portions along the southeast edge are too stony for soil salvage. The G-14 well site has been disturbed by logging. The road to G-13 and G-14 are existing roads, however, the soil will be bladed to the side of the road at site G-14 and replaced during reclamation.

Well site G-15 is about 50 percent disturbed by a road, slope cut and fill. The undisturbed portion of the site is a slope with a southeast aspect (35 to 45 percent gradient). Well site G-16 was previously the site of an exploration hole, having been disturbed and reclaimed. The topsoil on

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

An area approximately 100 x 100 feet on drill pad G-18 was disturbed by logging activity and has experienced natural recovery.

Mountain brush/snowberry plant community is representative of well site G-22 and access road. Woody species, big sagebrush and snowberry dominated the drill site. The access road to pad G-22 woody species includes serviceberry. The vegetation report is provided in Attachment 3-1.

The vegetation report in Attachment 3-1 for degas well sites G-25 and G-26 were prepared by Patrick Collins, Mt. Nebo Scientific. Attachment 3-2 contains a letter dated June 16, 2008 from Dean Stacy of the NRCS which discusses vegetation production for sites G-25, G-25, G-29 and G-30.

321.200 Land Productivity Prior to Mining

Productivity of the well site lands, G-22 access road and the AMV road prior to mining are shown in Table 3-1. Refer to Appendix 3-1 for a copy of the NRCS letter pertaining to productivity.

TABLE 3-1

Land Productivity

Well No.	Productivity (lbs.) Per Acre
G-1 (Previously Disturbed)	100
G-2	1,500*
G-5	1500*
G-6 (Majority Previously Disturbed)	300*
G-7	1200*
G-8 (Previously Disturbed)	1200

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

G-9 (Previously Disturbed)	1000*
G-10 (Previously Disturbed)	1000*
G-11 (Previously Disturbed)	1000*
G-12 (Previously Disturbed)	1000*
G-13	1000*
G-14 (Previously Disturbed)	1000*
G-15 (Previously Disturbed)	1000*
G-16 (Previously Disturbed)	1000*
G-17 (Previously Disturbed)	1000*
G-18	900 - 1200*
G-19 (Previously Disturbed)	500 - 800*
G-22 and Access Road	1000*
G-25 (Previously Disturbed)	1,500*
G-26 (Previously Disturbed)	1200*
G-29	1,800
G-30 (Previously Disturbed)	1500
G-31 (Previously Disturbed)	900 - 1200*
Access Road - AMV (Previously Disturbed)	900 - 1200*
Reference Areas	
Sagebrush/Snowberry/Grass (G-2, G-5, and G-7)	1500*
Aspen/Maple/Douglas Fir (G-1, G-6, and G-8)	300*
Mountain Brush/Conifer (G-9 thru G-11)	1200
Conifer/Mountain Brush/Pinyon Juniper (G-12, G-13 and G-15)	1100

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Refer to Attachment 3-2 for a listing of Federal and State Listed, Threatened, Endangered and Candidate Species and Sensitive Species.

323.100 Location and Boundary of Proposed Reference Area

Reference areas for the degassification wells were established during the vegetative study conducted in the Summer of 2003. Well sites G-2, G-5, and G-7 will be compared to the Sagebrush/Snowberry/Grass reference area and G-1, G-6, and G-8 to the Aspen/Maple/Douglas Fir reference area. Mountain Brush and Conifer is the reference area for well sites G-9 thru G-11. The reference area for Degas Well G-12 , G-13 and G-15 is Conifer, Mountain Brush and Pinyon Juniper. The reference area for Degas Well G-14, and G-19 is Aspen/Conifer, the reference area for G-16 thru G-18, G-22 (including access road), G-26 and G-31 and the AMV access road is Mountain Brush/Snowberry. Refer to Attachment 3-1 and Figure 3-1 for the location of the reference areas associated specifically with the degas wells. Reference areas are also shown on Plate 3-1 and 3-1E in the M&RP. Reference area for G-29 and G-30 is Mountain Brush/ Snowberry/Sagebrush.

323.200 Elevation and Locations of Monitoring Stations

Refer to Section 323.200 of the approved M&RP.

323.300 Facilities for Protection and Enhancement

Section 333.300 and 358.500 of the approved M&RP contain additional discussion pertaining to protective measures to be taken by Dugout Canyon on behalf of wildlife.

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

340 RECLAMATION PLAN

341 Revegetation

Revegetation of the sites will occur in two phases at drill site G-2. The first phase is to redistribute topsoil and seed the well area not needed for access and operation of the gas exhaust blower. The second phase will consist of plugging the well and distributing the remaining topsoil and seeding on the remaining pad area. Complete final reclamation at well sites G-2, G-5 and G-7 will be delayed, refer to Section 242.100 for additional detail and Attachment 5-2. Sites G-6, G-8 (never constructed), G-9, G-10, G-11thru G-19, G-22 (including access road) G-25, G-26, G-29, G-30 and G-31 will be reclaimed in one phase. A separate reclamation schedule has been proposed for the AMV road, it will be needed to access the degas wells during and following reclamation (Figure 5-26).

The short-term goal of this revegetation plan is the immediate stabilization of the disturbed sites through erosion control. This objective will be achieved through controlled grading practices, proper seedbed preparation to encourage rapid plant establishment, inclusion of rapidly establishing species in the seed mixture to be planted, and mulch application.

The long-term goals are to establish useful, and productive range. These goals will be attained through the selection and placement of desirable and productive plant species and a commitment to monitor and maintain revegetated areas throughout the bond liability period.

The well sites will be fenced to discourage wildlife and livestock from grazing the reclaimed areas until bond release.

341.100 Schedule and Timetable

The reclamation timetable is shown in Figures 5-15 (G-2)and 5-26 (G-3 thru G-19, G-22 (including access road), G-25, G-26, G-29, G-30 and G-31 and AMV access road) of this submittal and the reclamation monitoring schedule is found in Chapter 3, Table 3-3 of the approved M&RP.

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

356.200 Standards for Success

Standards of success will be applied in accordance with the approved postmining land use as described in this section.

Grazing Land and Pasture Land - The ground cover and production of living plants on the revegetated area will be at least equal to the reference area.

Cropland - There is no area designated as cropland within the degassification well sites, on associated access roads or the area of the AMV road.

Fish and Wildlife Habitat - The postmining land use for the degas well sites, G-22 access road and AMV road will be grazing, except on pre-existing roads or trails. Pre-existing roads will be returned to their approximate original contour and compacted.

Industrial, Commercial or Residential - The postmining land use for the permit area is not designated for industrial, commercial, or residential use.

Previously Disturbed Areas - Site G-1 (never constructed), G-6, G-7, G-8 (never constructed), G-9, G-10, G-11, G-12, G-14, G-15, G-16, G-17, G-19, G-25, G-26, G-30, G-31 and AMV access road have been previously disturbed. The AMV access road was previously used for logging, as a trail for hunting and for cattle to access the site of degas well G-31, the road from G-31 to G-18 has not been disturbed. Sites G-2, G-5, G-13, G-18, G-22 (including access road) and G-29 have not been previously disturbed. Standards of success for all sites will be applied in accordance with the postmining land use of grazing or as described in this section.

356.300 Siltation Structures

Siltation structures will be maintained until the disturbed areas have been stabilized and revegetated. For additional details on siltation structures, see Sections 542 and 763 of this amendment.

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Dugout M&RP, Methane Degasification Amendment

Chapter 5

Pages: 5-vi, 5-2, 5-17

Figures: 5-26

Attachment 5-2 Table 1

Attachment 5-4 Plate 4

Dugout Canyon Mine Permit Number C/007/039

Canyon Fuel Company

CLEAN COPIES

Title page for reference only

Dugout Canyon Mine

DAWGS

Developing Awareness While Generating Safety

LIST OF FIGURES

Figures follow the text, unless noted otherwise

Figure 5-1 Contour Map For G-1
Figure 5-2 Typical Cross Sections For G-1
Figure 5-3 Approximate Drilling Layout For G-1
Figure 5-4 Approximate Operational Layout For G-1
Figure 5-5 Contour Map For G-2
Figure 5-6 Typical Cross Sections For G-2
Figure 5-7 Approximate Drilling Layout For G-2
Figure 5-8 Approximate Operational Layout For G-2
Figure 5-13 Typical Road Cross Section
Figure 5-14 Typical Access Road Cross Section
Figure 5-15 Reclamation Time Table
Figure 5-16 Typical Well Design
Figure 5-20 Contour Map For G-5
Figure 5-21 Typical Cross Sections For G-5
Figure 5-22 Approximate Drilling Layout For G-5
Figure 5-23 Contour Map For G-6
Figure 5-24 Typical Cross Sections For G-6
Figure 5-25 Approximate Drilling Layout For G-6
Figure 5-26 Reclamation Schedule - Wells G-6 thru G-19, G-22, G-31 and AMV Access Road
Figure 5-27 Contour Map For G-7
Figure 5-28 Typical Cross Sections For G-7
Figure 5-29 Approximate Drilling Layout For G-7

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

512.200 Plans and Engineering Designs

Excess Spoil - No excess spoil will be generated from the well sites.

Durable Rock Fills - No durable rock fills will exist at the well sites.

Coal Mine Waste - No coal mine waste will exist at the well sites.

Impoundments - Refer to Section 733.200 of this submittal.

Primary Roads - Short sections of road are required to access well sites G-2, G-5, G-16 and G-22. The G-2 and G-5 road segments are within the footprint of the drill pad and therefore are included within the pads disturbed area boundary. Refer to Attachment 5-4, Plate 4 for the road system accessing the degas well sites. Well sites G-1 and G-8 (not drilled), well sites G-5 thru G-14, G-15 and G-17 pads, G-19, G-25, G-26, G-29, and G-30 wells sites are on existing roads, no primary access roads will be constructed. Refer to Section 527.200 for additional information and a description of the AMV road.

Variance from Approximate Original Contour - No variance from approximate original contour is required for the well sites.

513 Compliance with MSHA Regulations and MSHA Approval

513.100 Coal Processing Waste Dams and Embankments

No coal processing waste dams and embankments will exist at the well sites.

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

542 Narratives, Maps, and Plans

542.100 Reclamation Timetable

A timetable for the completion of each major step in the reclamation plan is presented in Figure 5-15 (G-2 and G-5) and 5-26 (G-6 thru G-19, G-22, G-22 Access Road, G-25, G-26, G-29, G-30, G-31 and the AMV access road). In addition to the two figures referenced above, information pertaining to reclamation timing for methane degas wells is provided in Attachment 5-2 and Section 542.700 of this amendment.

542.200 Plan for Backfilling, Soil Stabilization, Compacting, and Grading

Following completion of the venting activities, the well site will be prepared for contouring and soil distribution. Details regarding topsoil placement and revegetation are provided in Section 242 and Section 353, respectively.

Sedimentation Pond Removal and Interim Sediment Control - See Section 542.500 of this submittal.

542.300 Final Surface Configuration Maps and Cross Sections

The sites will be regraded to the approximate original contour, the contours representing the pre-disturbance topography also represent the reclamation topography. Refer to Figures 5-2, 5-6, 5-10, 5-18, 5-21, 5-24, 5-28 and Attachment 5-1 (G-8 thru G-19, G-22, G-22 access road, G-25, G-26, G-29, G-30 and G-31) to see cross sections representing the final surface configuration. Refer to Attachment 5-4, Plates 1 thru 3 for the surface configuration of the road and cross sections showing pre-mining, operational and post-mining contours.

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

FIGURE 5-26

Reclamation Schedule - Wells G-6 thru G-19, G-22, G-22 Access Road G-25, G-26, G-29 thru G-31

Task	Weeks to Complete from Start of Reclamation Activities		
	1	2	3
Plug Well			
Regrade Site to Original Contour			
Rip Subsoil			
Place Topsoil and Roughen			
Seed and Mulch			

The schedule assumes that weather conditions are conducive. Schedule is for each individual well not wells collectively. The first task does not apply to the reclamation of the access road to well site G-22, the road will follow the schedule for completion of tasks 2 thru 5. If necessary the timing may be extended.

Reclamation Schedule - AMV Access Road

Task	Weeks to Complete from Start of Reclamation Activities		
	1	2	3
Regrade Road to Original Contour			
Rip Subsoil			
Place Topsoil and Roughen			
Seed and Mulch			
Move to Next Road Segment, Repeat First Four Tasks.			

The schedule assumes that weather conditions are conducive. Schedule is for individual segments of the road not the entire road. The road will be broken up into 3 to 4 segments, thus the reclamation will take from six to eight weeks. If necessary the timing may be extended.

INCORPORATED
AUG 0 2 20
Div. of Oil, Gas & Mining

Attachment 5-2, Table 1

Well No.	Year Constructed		Year Plugged		Final Reclamation		Bond Release Phases
	Planned	Actual	Planned	Actual	Planned	Actual	Actual
G-2		2004		2009		2009	Phase I & II
G-3		2004		2005		2005	Phase I, II & III
G-4		2004		2005		2005	Phase I, II & III
G-5		2004		2009		2009	Phase I & II
G-6		2004		2005		2007	Phase I & II
G-7		2005		2008/2009		2009	Phase I & II
G-9		2005		2008	2010	2012	Phase I
G-10		2006		2008	2010	2010	Phase I & II
G-11		2006		2008	2015		
G-12		2006		2009	2010	2011	Phase I & II
G-13		2006		2008		2009	Phase I & II
G-14		2006	2010 (B)	2009 (A)	2010	2010	Phase I & II
G-15*	N/A				2015	2015	
G-16		2008			2011	2013	Phase I & II
G-17*	N/A				2014	2014	
G-18		2007	2010	2008 (A)	2010	2012	Phase I & II
G-19		2007		2008	2010	2010	Phase I
G-22		2008			2011	2013	Phase I
G-25		2009			2013	2013	Phase I
G-26		2009			2013	2013	Phase I
G-30	2010					2013	Phase I
G-31		2007	2010	2008 (A)	2011	2013	Phase I & II

Dates are approximate, all events are subject to availability of contractors, weather, mining needs, etc.
Although permitted, wells G-1, G-8 and G29 were never drilled/constructed
*Sites were not drilled but received minor disturbance

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

Dugout M&RP, Methane Degasification Amendment

Chapter 7

Page: 7-27

Dugout Canyon Mine Permit Number C/007/039

Canyon Fuel Company

CLEAN COPIES

Title page for reference only

763 Siltation Structures

763.100 Maintenance of Siltation Structures

All siltation structures will be maintained until removed in accordance with the approved reclamation plan.

763.200 Removal of Siltation Structures

When a siltation structure is removed, the land on which the siltation structure was located will be regraded and revegetated in accordance with the reclamation plan presented in Section 540.

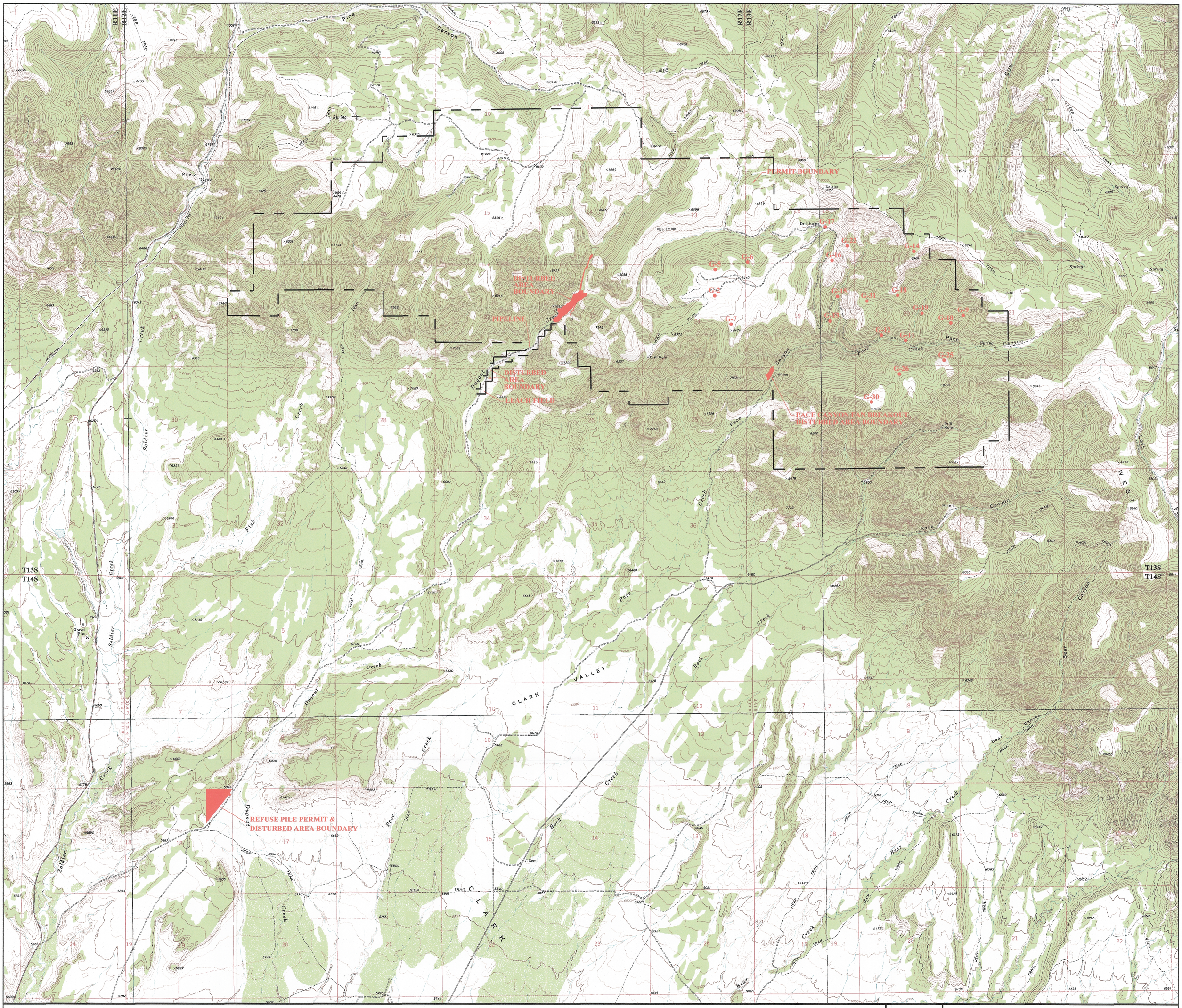
764 Structure Removal

A timetable for the reclamation of the sites is presented in Figures 5-15 (G-2 and G-5) and 5-26 (G-6 thru G-19, G-22, G-22 access road, G-25, G-26, G-29, G-30, G-31 and AMV access road).

765 Permanent Casing and Sealing of Wells

Refer to Section 542.700 of this submittal.

INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining



LEGEND

— - — - —	PERMIT AREA BOUNDARY
9,568	PERMITTED ACRES
106.9	DISTURBED ACRES

REGISTERED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
8/18/16
STATE OF UTAH

0' 2000'

REVISIONS	
DATE	BY
07/05/07	SC
09/04/07	SC
10/02/07	SC
02/21/08	VSM
10/01/08	VSM/SWF
04/23/09	VSM/SWF
06/16/09	VSM/SWF
08/05/09	VSM/SWF
03/25/10	VSM/SWF
03/02/12	JKS
07/14/16	BK
7/25/16	BK/JKS
08/12/16	BK

Canyon Fuel Company, LLC
Soldier Canyon & Dugout Canyon Mines

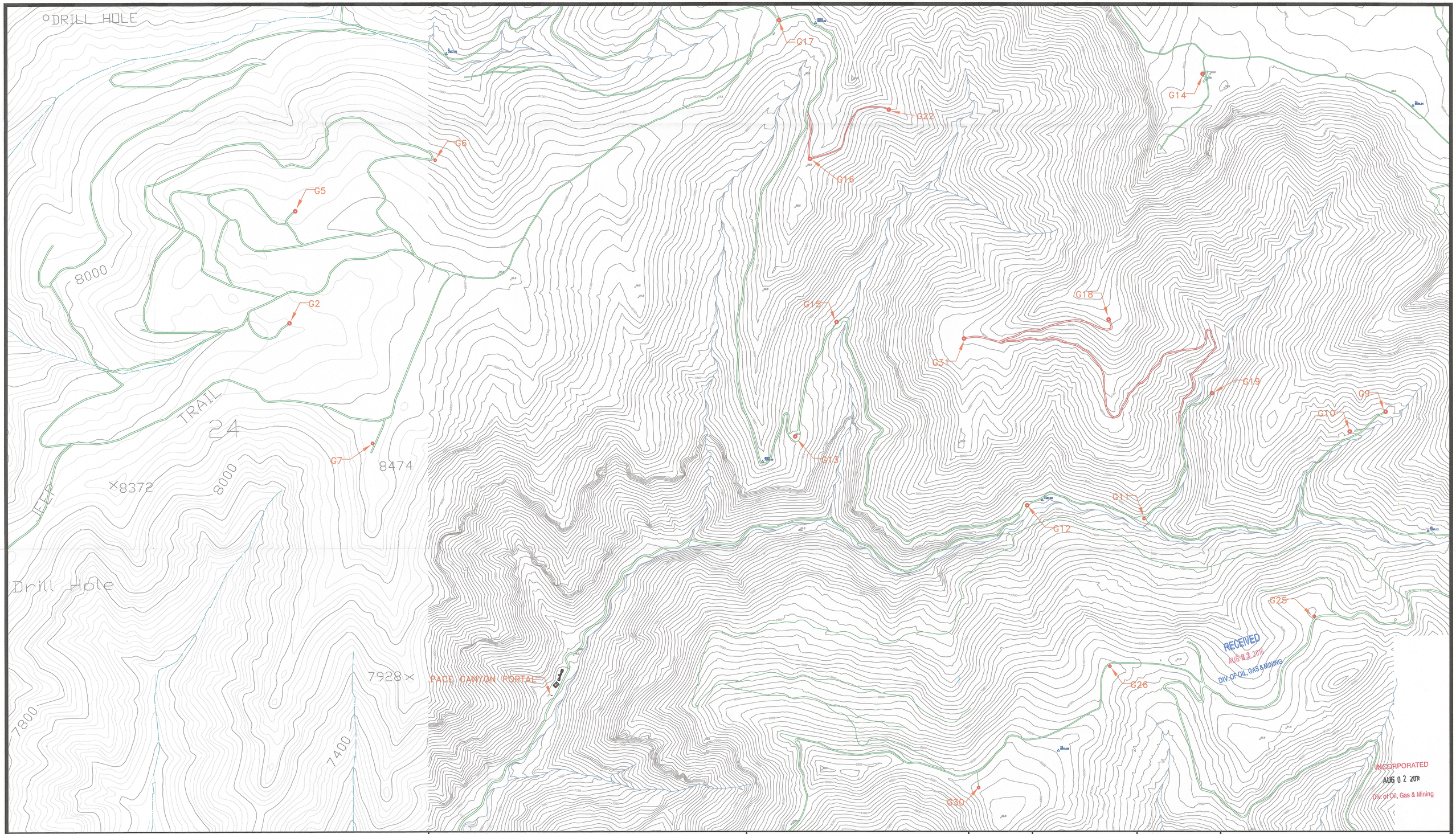
INCORPORATED
AUG 0 2 2016
Div. of Oil, Gas & Mining

RECEIVED
AUG 2 2 2016
DIV. OF OIL, GAS & MINING

DUGOUT CANYON MINE PERMIT AREA

Dugout Canyon Mine

DRAWN BY: RR	DATE: FEBRUARY 26, 2003	SCALE: 1" = 2000'
APPROVED BY: VSM	FILE NAME: PLATE 1-4.DWG	DRAWING OR MAP NUMBER PLATE 1-4



RECEIVED
AUG 02 2016
DIV. OF OIL, GAS & MINING

INCORPORATED
AUG 02 2016
Div. of Oil, Gas & Mining

CONTOUR INTERVAL: 40 FT

CONTOUR INTERVAL: 25 FT

NOTE: NOT ALL ROADS IN THE AREA ARE SHOWN ON THIS DRAWING, BUT ALL ROADS USED FOR ACCESS TO THE DEGAS WELLS PERMITTED THROUGH 2008 ARE SHOWN.

REGISTERED PROFESSIONAL ENGINEER
No. 151610
DAVID G. SPILLMAN
8/12/16
STATE OF UTAH

LEGEND

- EXISTING ROADS
- EXISTING ROADS (LOCATION– FIELD SURVEY ONLY)
- ROADS CONSTRUCTED BY DUGOUT CANYON MINE
- Gxx – DEGAS WELL LOCATION

REVISIONS OR UP-DATES		
NO.	DATE	BY
3	03/30/10	VSM
4	06/10/10	JKS
5	07/27/10	JKS
6	07/15/16	BK
7	08/12/16	BK

FILENAME: ATT5-4 PLATE4.DWG

DATE:	10/30/08
DESIGNED BY:	
DRAWN BY:	STV
CHECKED BY:	
SCALE:	1"=500 FT

Canyon Fuel Company, LLC
Dugout Canyon Mine

PACE CANYON ROAD SYSTEM

P.O BOX 1029
WELLINGTON, UTAH 84542

DRAWING OR MAP NUMBER
ATTACHMENT 5-4 PLATE 4